DOCUMENT RESUME

ED 304 192 JC 890 116

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TITLE State of Wisconsin VTAE Operational Planning Data.
INSTITUTION Wisconsin Vocational, Technical and Adult Education Administrators' Association.
PUB DATE Mar 89
NOTE 107p.; Prepared by the State Research, Planning, and Development Committee for the Wisconsin VTAE Administrators' Association.
PUB TYPE Reports - Descriptive (141) -- Statistical Data (110)

EDRS PRICE MF01/PC05 Plus Postage.
DESCRIPTORS Adult Vocational Education; College Graduates; Community Colleges; *Educational Finance; *Enrollment Trends; Expenditures; Majors (Students); *Resource Allocation; School Personnel; State Surveys; Student Financial Aid; Technical Education; Technical Institutes; Two Year Colleges; *Two Year College Students; *Vocational Education
IDENTIFIERS *Wisconsin

ABSTRACT

Tables, graphs, and charts are provided in this report on trends in operational planning data in the Wisconsin Vocational, Technical, and Adult Education (VTAE) system for the period from 1979-80 to 1987-88. Four operational data sets are analyzed: full-time equivalent (FTE) and headcount enrollments and cost per FTE; VTAE graduates; operational faculty and staff compensation; and district finances. Data are presented for the state as a whole and for each district. In addition, concerns and misapprehensions are addressed with respect to labor market information and projections, high technology, enrollment management, and fiscal planning. Highlighted findings include the following: (1) state VTAE FTE enrollment peaked in 1982-83 at 64,303 students, followed by declines ranging from 1% to 6.5% in most subsequent years; (2) though four of the 16 VTAE districts showed enrollment increases between 1986-87 and 1987-88, the system experienced an overall decrease of 2.5% from 58,091 to 56,622 students; (3) in 13 districts, the majority of students were women; (4) one college enrolled 55% of the system's minority students; (5) the percentage of associate degree enrollments increased from 46% in 1979-80 to 54% in 1987-88; (6) direct instructional costs for the Technical Division increased 144% between 1979-80 and 1987-88, compared to 113% for all other divisions; and (7) statewide, Nursing Assistant, Accounting, and Nursing programs had the largest number of graduates in 1987-88. (AAC)

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STATE OF WISCONSIN VTAE OPERATIONAL PLANNING DATA

State Research, Planning, and Development Committee for the Wisconsin VTAE Administrators Association

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Dennis W. Redovich
Milwaukee Area Technical College

Third Year of Study
March 1989

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EXECUTIVE SUMMARY

This is the third year of a study of operational planning data trends in the VTAE system. This study includes 1987-88 enrollment, graduation, and cost allocation data. The conclusions of the study are shown on page 68.

Four operational data areas have been analyzed in this report: FTE and head-count enrollments and cost/FTE, VTAE graduates, operational faculty and staff compensation, and district finances. Data is presented by state totals and for each district.

FTE Enrollment

State VTAE FTE enrollment peaked in 1982-83 at 64,303, declined 1% to 63,511 in 1983-84, 6.5% to 59,384 in 1984-85, and 2.4% to 57,935 in 1985-86; FTE increased .3% to 58,091 in 1986-87 and decreased -2.5% to 56,622 in 1987-88.

FTE enrollments by district are shown in Table 1 and Graph 1 for the years 1979-80 to 1987-88. Some trends are as follows:

1. Milwaukee 22.2% of 1987-88 state VTAE FTEs and Madison 12.8% have maintained about one-third of the state total FTEs over this period.

2. Six (6) districts decreased in enrollment over the eight-year period:

Waukesha	-7.9%	Moraine Park	-3.1%
Western	-5.7%	Gateway	-0.3%
Indianhead	-4.8%	Lakeshore	-0.1%

3. Nine (9) districts increased over the eight-year period:

Chippewa Valley	+15.8%	Fox Valley	+5.7%
Mid-State	+14.8%	Milwaukee	+4.4%
Madison	+12.6%	Nicolet	+3.4%
Northeast	+10.3%	Blackhawk	+0.9%
Southwest	+ 7.8%		

FTE enrollments for 1986-87 and 1987-88 by district are shown in Table 1A and Graph 1A. Some significant changes from 1986-87 to 1987-88 are as follows:

1. Twelve (12) of the sixteen districts decreased in FTE enrollment from 1986-87 to 1987-88 as follows:

Southwest	-14.0%	North Central	-2.8%
Gateway	-10.9%	Western	-1.9%
Waukesha	-8.3%	Chippewa Valley	-1.7%
Moraine Park	-6.6%	Northeast	-.7%
Nicolet	-5.2%	Fox Valley	-.2%
Milwaukee	-3.2%	Mid-State	-.2%

2. Four (4) districts increased in FTE enrollment from 1986-87 to 1987-88.

Madison	+3.4%
Indianhead	+2.2%
Blackhawk	+2.2%
Lakeshore	+2.0%

3. Total VTAE system FTE decreased 2.5% from 58,091 to 56,622 (-1,469) from 1986-87 to 1987-88.

State FTE and Headcounts by Aid Code

1. Headcounts have declined 7.0% while FTEs increased 3.8% from 1979-80 to 1987-88.

2. Government JTPA or ABE programs are down significantly from 1979-80 to 1987-88:

   Code 39 CETA or JTPA 6,538 to 694 headcount
   Code 38 ABE 11,350 to 6,533 headcount

3. GOAL enrollments increased from 7,303 to 22,066 headcount from 1979-80 to 1987-88.

4. General Adult, which includes about 12% basic skills training, is up from 70,915 to 78,076 from 1979-80 to 1987-88.

5. Avocational is down from 90,080 to 40,408 from 1979-80 to 1987-88.

6. Vocational-Adult headcounts began and ended the eight-year period with similar counts (242,128 and 242,347) while Community Service enrollments went down significantly (129,621 to 64,443).

7. Occupational Adult, a category which was not used in 1979-80, had 155,649 headcount in 1987-88 which represented 36.9% of the total unduplicated headcount of 421,666 in 1987-88.

Enrollment by Sex, Ethnic Origin, Handicapped, and Disadvantaged by District 1987-88

1. Thirteen (13) of 16 districts have a majority of women students. Nicolet with 61.1% female has the highest percentage in 1987-88. Fox Valley with 47.6% female had the lowest (Graph 1C) in 1987-88.

2. Milwaukee (13,861 minority students) had 55% of the state VTAE minority enrollment of 25,361 in 1987-88. A total of 23.4% of MATC-Milwaukee headcount enrollment was minority, including 10,416 blacks which represented 75% of black enrollment in the state (Graph 1C).

3. Indianhead had the highest number of American Indian students with 488 in 1987-88.

4. With the exception of Gateway with 10.3% and Milwaukee with 23.4% minority, all other districts had less than 4.5% minority enrollment.

FTE and Costs by State Code 1979-80 to 1987-88

1. The percentage of Associate Degree enrollments has increased from 46% of total FTE (25,276 out of 54,550) in 1979-80 to 54% (30,868 out of 56,648) in 1987-88.

2. College Parallel and Associate Degree enrollments have increased 37% and 22% respectively while Vocational, Vocational Adult, and Community Services have decreased 9.4%, 14%, and 51% respectively. Total FTE enrollment increased 3.5% over the eight-year period.

3. Costs per FTE have increased more rapidly for College Parallel (+108%), Associate Degree (+93%), and Vocational (+107%) than for Vocational-Adult (+44%) while Community Services increased slightly (3%). Overall costs per FTE increased 81%.

4. Statewide less than 15% of VTAE students were full-time taking 24 or more credits annually in 1987-88.

FTE and Costs by Instructional Division 1979-80 to 1987-88

1. General Education generated more FTEs 20,807 in 1987-88 (37% of total) than any other division. Business with 15,396 in 1987-88 produced 27% of total FTEs and is second highest. General Education and Business FTEs have increased 16% and 18% respectively from 1979-80 to 1987-88.

2. The Technical division FTEs had the highest percentage increase (40%) (Television excepted). Technical FTEs increased from 2,245 in 1979-80 to 3,153 in 1987-88. However, Technical FTEs declined from 1986-87 to 1987-88.

3. Five divisions decreased in FTE from 1979-80 to 1987-88: Service and Health 2%, Graphic 13%, Home Economics 22%, Agriculture 26%, and Industrial 31%.

4. Direct Instructional Costs for the Technical division increased 144% compared to total instructional cost average of 113% for all divisions.

Graduates 1975-76 to 1986-87

1. The number of graduates has increased in seven years and decreased in five years over the twelve-year period. The largest percentage change was a 12% increase in 1978-79. The largest decrease was 10.7% in 1984-85. This also represents the largest change in numbers from 16,622 graduates in 1983-84 to 14,844 in 1984-85 (-1,778).

2. The 39 programs with 100 or more graduates at any time over the 12-year period represent 13% of the 289 degree, diploma, or certificate programs with graduates in 1987-88. These 39 programs contributed 65% (9,014) of the total 13,804 degree and certificate graduates in 1987-88. The 39 programs had more than 60% of the total graduates in most years since 1974-75.

3. The Business Division produces more graduates from programs with more than 100 graduates than any other division (3,177 in 1987-88).

4. The Nursing Assistant program produces more graduates than any other individual program, 1,158 in 1987-88. This one program produced more graduates in 1987-88 than the 107 new programs started since 1980 in the VTAE System (878 graduates).

TOP TEN PROGRAMS STATEWIDE AND BY DISTRICT BY NUMBER OF GRADUATES IN 1987-88

Rank		Name of Program	No. of Graduates	Cumulative % of Total Graduates	Total* FTE	Cumulative % of Total FTE
STATEWIDE						
1	30-510-1	Nursing Assistant	1,158	7.9%	244	0.4%
2	10-101-1	Accounting	820	13.5%	2,796	5.4%
3	10-510-1	Nursing	674	18.1%	1,693	8.4%
4	10-104-3	Marketing	427	21.0%	1,661	11.3%
5	10-504-1	Police Science	377	23.5%	1,357	13.7%
6	10-107-1	Data Processing	354	26.0%	1,376	16.1%
7	30-090-1	Farm Training	354	28.4%	222	16.5%
8	10-605-1	Electronics	274	30.2%	968	18.2%
9	31-101-1	Account Clerk	252	31.9%	348	18.8%
10	10-106-2	Adm Asst-Secretarial	248	33.6%	1,010	20.6%
		TOTAL	4,938	14,680 Total State Graduates	11,675 *	56,648 Total Program State FTE*

Top 10 include:
2 Short Term (30)
1 1-Year Diploma (31)
7 Associate Degree (10)
New programs in state since 1980 = 0

*NOTE: FTE by program includes all courses that are part of the program, both occupational and general education. Program FTEs are used in all district tables that follow.

There are 336 programs in the state that have at least one graduate. Ten (3%) of programs in state VTAE produce 33.6% of graduates and 20.6% of FTEs.

New Programs Since 1980

The 107 new degree or diploma programs approved from 1980 to 1988 produced 878 graduates (6% of total graduates) in 1987-88. Sixty-eight (68) of the 107 programs (64%) had at least one graduate in 1987-88. Another 244 graduates were produced in 1987-88 by the 81 apprentice programs approved from 1980 to 1988. Most of the apprentice programs existed before 1980 but were not given program status until 1980 or after. The number of new programs approved between 1980 and 1988 is 188.

The top ten new (since 1980) degree, diploma, or certificate programs in respect to graduates in 1987-88 are:

Rank		Program	District	Year Approved	Graduates Statewide
1	31-107-3	Office Computer Specialist	(Western)	1982	72
2	31-101-2	Microcomputer Acctg Specialist	(4 Districts)	1985	70
3	30-404-9	Parts Specialist	(4 Districts)	1980	47
4	31-106-8	Information Processing Specialist	(North Central)	1985	45
5	10-107-5	Microcomputer Application Analyst	(2 Districts)	1985	30
6	31-421-2	Mechanical and Computer Drafting	(4 Districts)	1985	27
7	31-107-6	Computer Operator	(Fox Valley)	1985	26
8	31-303-6	Retail Bakery Production	(4 Districts)	1985	24
9-10	30-307-1	Child Day Care	(Northeast)	1980	22
	10-503-2	Fire Protection Technology	(2 Districts)	1980	22
	10-605-8	Electronics - Telecommunications	(3 Districts)	1984	22

Operational Staff and Average Compensation

1. Milwaukee had the highest average compensation, salary and benefits, from 1979-80 to 1984-85 but was surpassed by Madison in 1985-86, 1986-87, and 1987-88, $42,888 to $40,400 for Milwaukee in the latest year. Other districts changed greatly over the eight-year period in rank of compensation; for example, decreasing were Gateway from 4 to 14, Blackhawk from 8 to 16; and increasing were Fox Valley from 14 to 4 and Waukesha from 11 to 2.

2. Waukesha had the highest average increase in compensation $21,783 (+106%) and Blackhawk had the smallest increase $10,071 (+49%) from 1979-80 to 1987-88.

3. Most districts show small increases in FTE employees from 1979-80 to 1987-88.

Table 8A shows 1987-88 faculty compensation in rank order highest to lowest. Range is from Milwaukee $47,789 (includes salary and fringe benefits) to Indianhead $34,210.

Finances - Operational and Debt Service Mill Rates, Tax Levy, Valuation, State Aid, and Cost/FTE

Tables 9 and 10 show mill rates and tax levies by district for 1979-80 and 1988-89 respectively. Some highlights are as follows:

1. Southwest, which had the highest total mill rate in 1988-89 at 1.911, was fifth in 1979-80 at 1.263.

2. Milwaukee had the highest total mill rate from 1979-80 to 1984-85 but dropped to number 2 in 1985-86 and to number 4 in 1986-87, 1987-88, and 1988-89. Milwaukee had the highest mill rate for years prior to 1979-80.

3. Blackhawk had the largest increase in total mill rate .807 (83%) from 1979-80 to 1988-89.

4. Madison had the smallest increase in mill rate .179 (15%).

5. Madison had the lowest total mill rate in 1988-89 (1.375) with 0 debt service and Waukesha had the lowest operational mill rate of 1.34124.

Table 11 shows changes in valuation by district from 1979-80 to 1988-89. All districts except Southwest show increases in valuation from 1979-80 to 1988-89. Some highlights of changes in valuation from 1979 to 1988 are as follows:

1. Waukesha had the highest percentage increase, 49.45%.

2. Southwest decreased 10.34%.

3. Milwaukee had the largest dollar value increase in valuation $5,190,064,021 (25.51%) followed by Madison $4,037,070,333 (37.10%).

Table 12 shows the change in valuation by district between 1987-88 and 1988-89 (TID OUT) with the total increasing statewide 3.66%.

1. Waukesha had the largest percentage increase 8.52% ($884,111,489).

2. Milwaukee had the largest dollar increase $1,045,069,821 (4.27%).

3. Southwest was the only district to decrease, $15,824,003 (.61%).

Table 13 shows the Cost/FTE by District for 1986-87 and 1987-88.

1. Nicolet and Waukesha had the highest cost/FTE in both years.

2. In 1987-88 seven districts were above the state average cost/FTE $5,989 (Nicolet, Waukesha, Southwest, North Central, Blackhawk, Moraine Park and Lakeshore) and nine districts were below (Milwaukee, Indianhead, Fox Valley, Gateway, Mid-State, Chippewa Valley, Northeast, Madison, and Western).

Table 14 shows Aidable Costs by District for 1987-88. Milwaukee had the highest net aidable amount $61,889,226. Nicolet had the lowest aidable amount $4,678,563.

State aids for 1987-88 are shown in Table 15. Five districts (Southwest, Blackhawk, Mid-State, North Central, and Nicolet) received supplemental aids totaling $1,789,129 over the state aids allocated by formula. Seven districts will receive Incentive Grant or supplemental aids in 1988-89.

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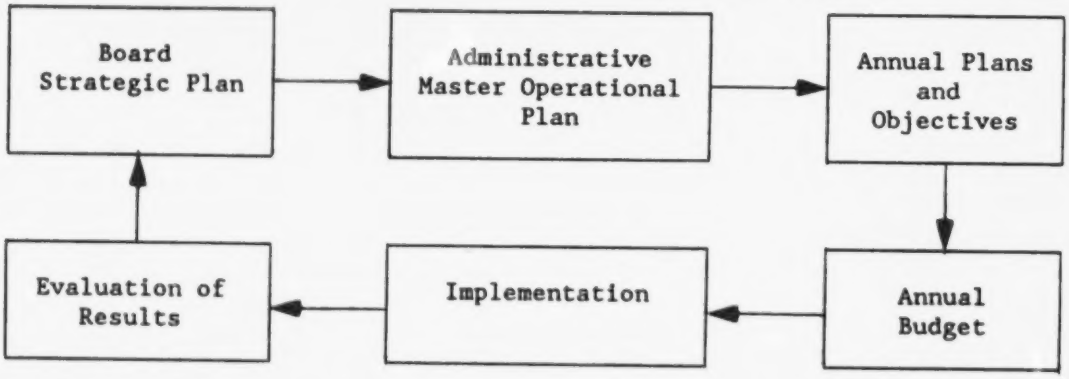
I. INTRODUCTION

In July 1985, the Research, Planning, and Development Administrators Committee published "Strategic Planning Process: Update 1984-85" which described the elements of Strategic Planning and presented a progress report on implementation of Strategic Planning with the VTAE districts. This report addresses operational planning which follows strategic planning in the overall planning process. The diagram below represents the continuous relationship of the district planning process.



Operational planning data is necessary in order to prepare specific operational plans. This operational data includes such areas as enrollment, graduates, programs offered, program costs, tax rate and levy, and valuation of property. This report includes some operational planning data in these areas.

Acknowledgments - State VTAE Board personnel provided the necessary base data by year that was used in this report. Ronald Braem, Catherine Cotter, James Halloran, Norman Kenney, and Robert Millard of the State Board staff provided input to this report. Judy Molzen, MATC Research Secretary, is responsible for the preparation of the manuscript.

II. ANALYSIS OF FTE ENROLLMENTS IN THE VTAE SYSTEM 1979-80 TO 1987-88

FTE enrollments by district are shown in Table 1 and Graph 1 for the years 1979-80 to 1987-88. Some trends are as follows:

1. Milwaukee 22.2% of 1987-88 state VTAE FTEs and Madison 12.8% have maintained about one-third of the state total FTEs over this period.

2. Six (6) districts decreased in enrollment over the eight-year period:

Waukesha	-7.9%	Moraine Park	-3.1%
Western	-5.7%	Gateway	-0.3%
Indianhead	-4.8%	Lakeshore	-0.1%

3. Nine (9) districts increased over the eight-year period:

Chippewa Valley	+15.8%	Fox Valley	+5.7%
Mid-State	+14.8%	Milwaukee	+4.4%
Madison	+12.6%	Nicolet	+3.4%
Northeast	+10.3%	Blackhawk	+0.9%
Southwest	+ 7.8%		

4. North Central had 2,405 FTEs in 1979-80 and 2,404 FTEs in 1987-88.

5. Nine (9) district FTE enrollments peaked in 1982-83: Gateway, Waukesha, Western, Chippewa Valley, Moraine Park, Indianhead, North Central, Lakeshore, and Mid-State. Six (6) district FTE enrollments peaked in 1983-84: Milwaukee, Madison, Fox Valley, Northeast, Blackhawk, and Southwest. One district, Nicolet, peaked in 1980-81.

6. As shown in Graph 1, the trend lines for the sixteen districts are similar. Enrollments are at their peaks in 1982-83 and 1983-84 and declined in 1984-85, 1986-85, and 1987-88.

FTE enrollments for 1986-87 and 1987-88 by district are shown in Table 1A and Graph 1A. Some significant changes from 1986-87 to 1987-88 are as follows:

1. Twelve (12) of the sixteen districts decreased in FTE enrollment from 1986-87 to 1987-88 as follows:

Southwest	-14.0%	North Central	-2.8%
Gateway	-10.9%	Western	-1.9%
Waukesha	-8.3%	Chippewa Valley	-1.7%
Moraine Park	-6.6%	Northeast	-.7%
Nicolet	-5.2%	Fox Valley	-.2%
Milwaukee	-3.2%	Mid-State	-.2%

2. Four (4) districts increased in FTE enrollment from 1986-87 to 1987-88.

Madison	+3.4%
Indianhead	+2.2%
Blackhawk	+2.2%
Lakeshore	+2.0%

3. Total VTAE system FTE decreased 2.5% from 58,091 to 56,622 (-1,469) from 1986-87 to 1987-88.

<u>Headcount FTE and Graduates by District</u>

Table 1B and Graph 1B show, by district program and course, headcounts for 1986-87, part-time (PT) and full-time (FT) enrollments for 1987-88, and graduates for 1986-87 and 1987-88. State staff changed headcount designations from program/course enrollments to PT or FT in 1987-88. Full-time is defined as 24 or more credits per academic year. Some highlights are as follows:

1. Lakeshore .07 and Fox Valley .11 had the lowest ratio of program to course enrollments in 1986-87. The smaller the ratio the fewer students there are enrolled in programs (7% at Lakeshore and 11% at Fox Valley).

2. Gateway had the largest ratio of program to course enrollment .38 which means 38% of its headcount enrollment had been officially accepted into programs. Gateway also had the highest ratio of FT to PT students .37 which means that 37% of its students in 1987-88 were taking 12 or more credits. Gateway had more FT students 7,775 than Milwaukee 5,097 in 1987-88.

3. Fox Valley had the lowest ratio of FT to PT .07 which indicates that only 7% of its students were full time.

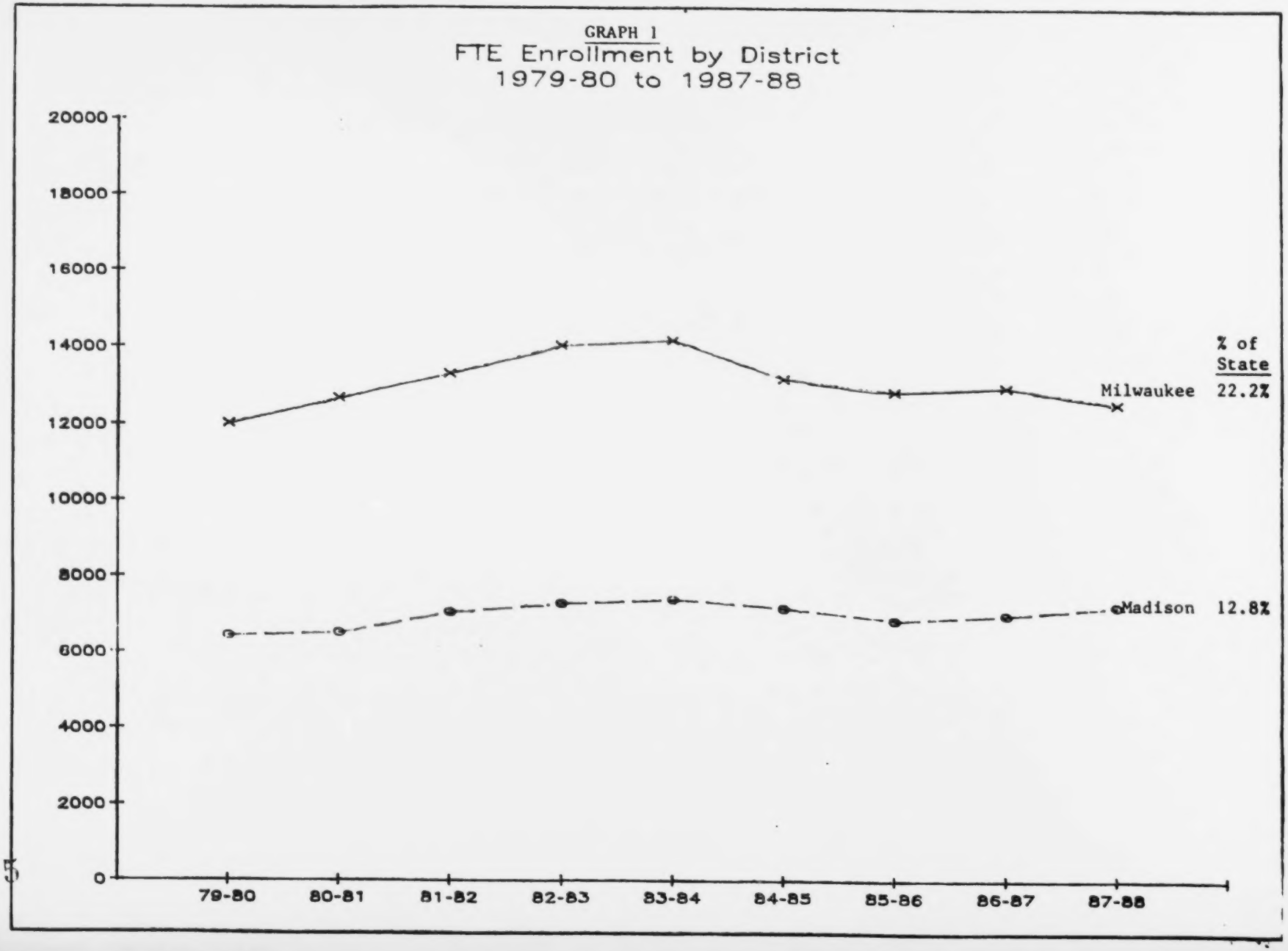
TABLE 1
FTE ENROLLMENT BY DISTRICT
1979-80 to 1987-88

RANK 87-88		79-80		80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88		Change 79-80 - 87-88	
		No.	%	No.	No.	No.	No.	No.	No.	No.	No.	%	No.	%
1	Milwaukee	12,019	22.0	12,686	13,310	14,034	14,179	13,179	12,845	12,963	12,551	22.2	532	4.4%
2	Madison	6,435	11.8	6,515	7,065	7,306	7,421	7,182	6,859	7,006	7,246	12.8	811	12.6%
3	Fox Valley	4,027	7.4	4,298	4,700	4,708	4,753	4,262	4,060	4,265	4,258	7.5	231	5.7%
4	Gateway	4,048	7.4	4,314	4,883	5,001	4,583	4,484	4,627	4,529	4,035	7.1	-13	-0.3%
5	Northeast	3,615	6.6	4,187	4,223	4,282	4,300	4,099	4,048	4,015	3,986	7.0	371	10.3%
6	Chippewa Valley	2,932	5.4	3,363	3,538	3,625	3,574	3,188	3,360	3,454	3,395	6.0	463	15.8%
7	Waukesha	3,478	6.4	3,962	4,058	4,135	3,990	3,613	3,414	3,493	3,204	5.7	-274	-7.9%
8	Western	3,345	6.1	3,655	3,835	3,714	3,713	3,463	3,363	3,215	3,155	5.6	-190	-5.7%
9	Indianhead	2,688	4.9	3,013	3,045	3,052	2,817	2,566	2,615	2,504	2,560	4.5	-128	-4.8%
10	Moraine Park	2,483	4.6	2,699	2,843	2,989	2,878	2,643	2,498	2,575	2,406	4.2	-77	-3.1%
11	North Central	2,405	4.4	2,717	2,775	2,829	2,779	2,512	2,484	2,474	2,404	4.2	-1	0.0%
12	Lakeshore	2,007	3.7	2,402	2,384	2,463	2,388	2,270	2,089	1,965	2,004	3.5	-3	-0.1%
13	Mid-State	1,498	2.7	1,692	1,806	1,752	1,678	1,732	1,716	1,723	1,719	3.0	221	14.8%
14	Blackhawk	1,605	2.9	1,786	1,869	1,899	1,920	1,824	1,604	1,585	1,620	2.9	15	0.9%
15	Southwest	1,119	2.1	1,278	1,386	1,505	1,535	1,418	1,407	1,403	1,206	2.1	87	7.8%
16	Nicolet	846	1.6	1,023	971	1,007	1,003	949	945	923	875	1.5	29	3.4%
		54,550	100.0	59,590	62,691	64,303	63,511	59,384	57,935	58,091	56,622	100.0	2,072	3.8%

Source: Wisconsin Board of VTAE.
Prepared by MATC Department of Research, Planning, and Development; 9/28/88.

GRAPH 1

FTE Enrollment by District
1979-80 to 1987-88



GRAPH 1 (Continued)

FTE Enrollment by District
1979-80 to 1987-88

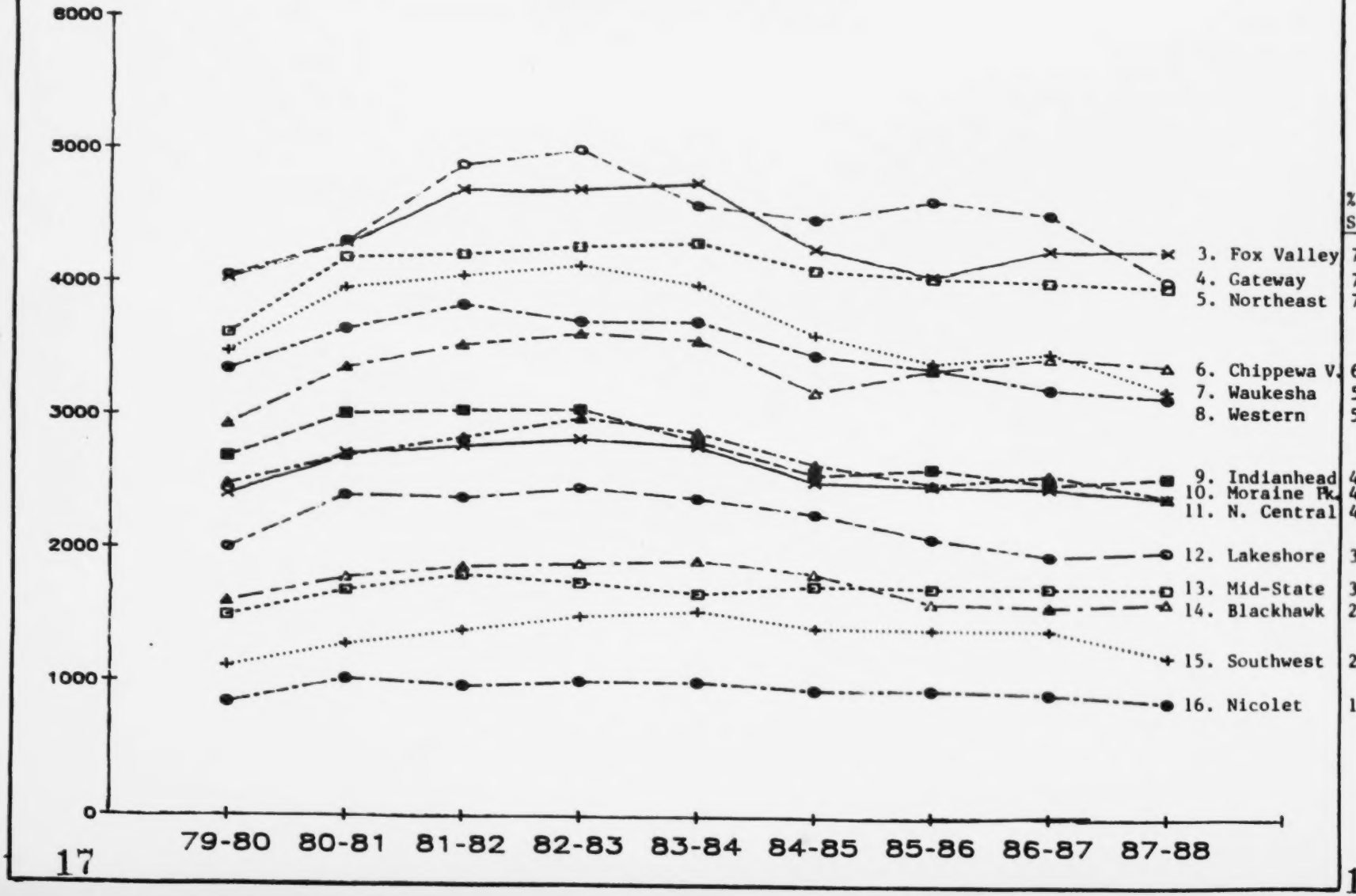


TABLE 1A
FTE ENROLLMENT BY DISTRICT
1986-87 and 1987-88

RANK 87-88		RANK 86-87	86-87 No.	86-87 %	87-88 No.	87-88 %	Change 86-87 to 87-88 No.	Change 86-87 to 87-88 %
1	Milwaukee	1	12,963	22.3	12,551	22.2	-412	-3.2%
2	Madison	2	7,006	12.1	7,246	12.8	240	3.4%
3	Fox Valley	4	4,265	7.3	4,258	7.5	-7	-0.2%
4	Gateway	3	4,529	7.8	4,035	7.1	-494	-10.9%
5	Northeast	5	4,015	6.9	3,986	7.0	-29	-0.7%
6	Chippewa Valley	7	3,454	5.9	3,395	6.0	-59	-1.7%
7	Waukesha	6	3,493	6.0	3,204	5.7	-289	-8.3%
8	Western	8	3,215	5.5	3,155	5.6	-60	-1.9%
9	Indianhead	10	2,504	4.3	2,560	4.5	56	2.2%
10	Moraine Park	9	2,575	4.4	2,406	4.2	-169	-6.6%
11	North Central	11	2,474	4.3	2,404	4.2	-70	-2.8%
12	Lakeshore	12	1,965	3.4	2,004	3.5	39	2.0%
13	Mid-State	13	1,723	3.0	1,719	3.0	-4	-0.2%
14	Blackhawk	14	1,585	2.7	1,620	2.9	35	2.2%
15	Southwest	15	1,403	2.4	1,206	2.1	-197	-14.0%
16	Nicolet	16	923	1.6	875	1.5	-48	-5.2%
			58,091	100.0	56,622	100.0	-1,469	-2.5%

Source: Wisconsin Board of VTAE.
Prepared by NATC Department of Research, Planning, and Development; 9/28/88.

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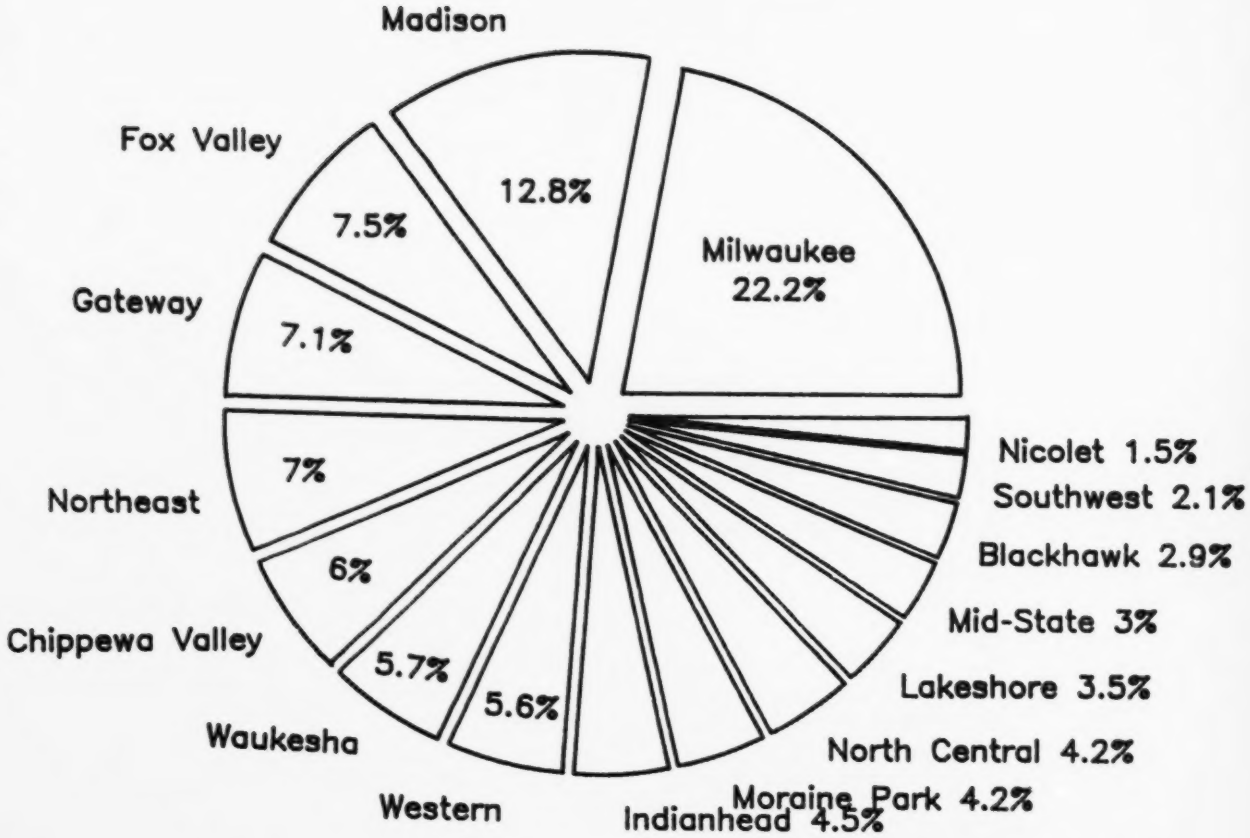
GRAPH 1A

FTE Enrollment by District 1987-88



The eight districts with less than 5% of the 1987-88 FTE enrollment together comprised 25.9% of the total.

TABLE 1B
PROGRAM, COURSE, FULL-TIME, AND PART-TIME HEADCOUNT ENROLLMENT AND GRADUATES
1986-87 AND 1987-88 BY DISTRICT

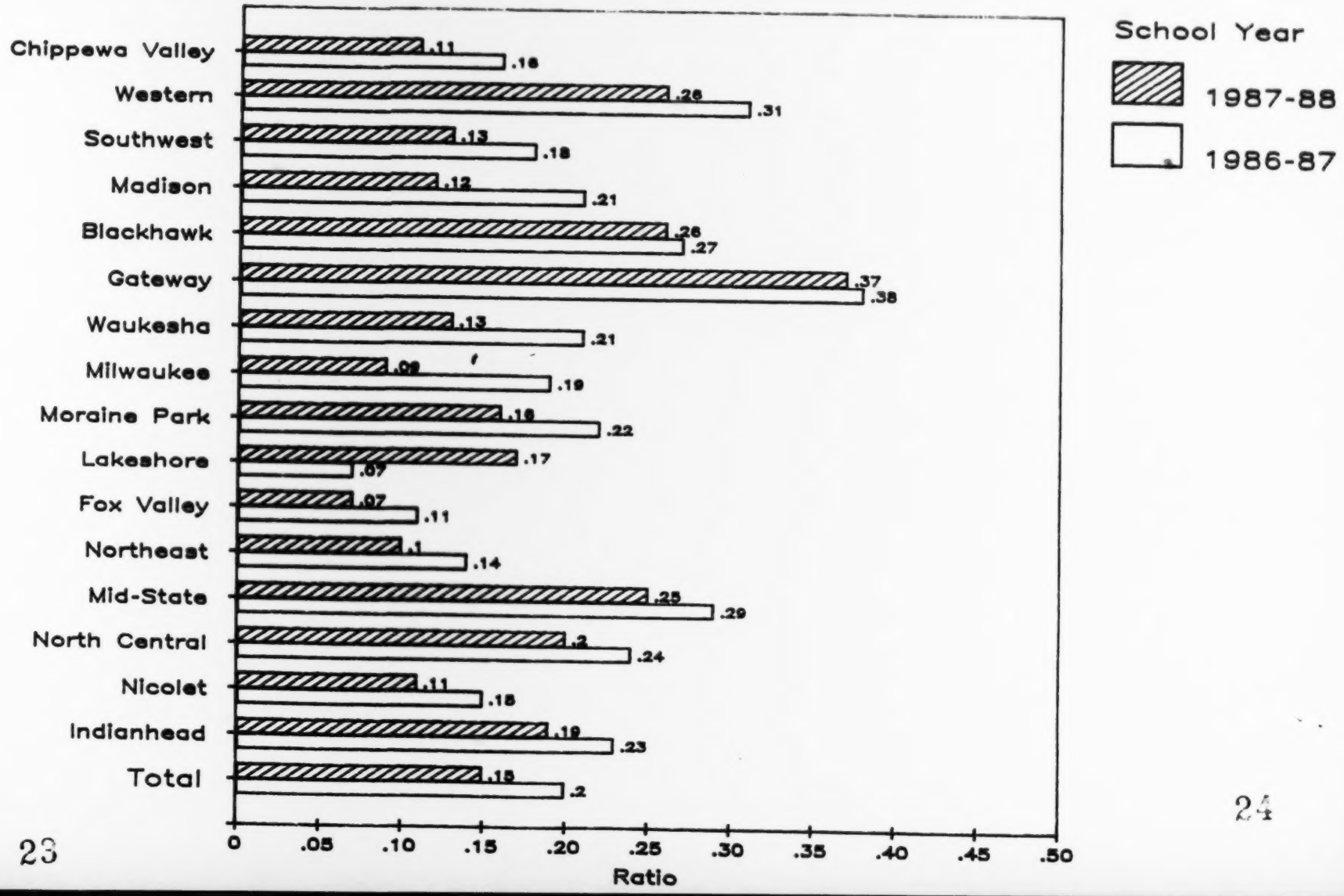
District	1986-87 Enrollment		1986-87 Ratio Program Enlt/ Course Enlt	1986-87 Graduates	1986-87 Ratio Graduates/ Program Enlt	1987-88 Enrollment		1987-88 Ratio Full-Time/ Part-Time	1987-88 Graduates	1987-88 Ratio Graduates/ Full-Time
	Program	Course				Full-Time	Part-Time			
Chippewa Valley	3,617	23,281	0.16	1,179	0.33	2,584	23,114	0.11	1,267	0.49
Western	4,826	15,362	0.31	995	0.21	3,920	15,034	0.26	917	0.23
Southwest	1,920	10,393	0.18	605	0.32	1,348	10,104	0.13	495	0.37
Madison	7,740	37,534	0.21	1,671	0.22	4,692	40,433	0.12	1,592	0.34
Blackhawk	2,759	10,200	0.27	455	0.16	2,542	9,899	0.26	361	0.14
Gateway	8,981	23,581	0.38	1,096	0.12	7,775	21,165	0.37	989	0.13
Waukesha	6,071	28,306	0.21	791	0.13	3,724	28,227	0.13	707	0.19
Milwaukee	9,531	51,397	0.19	2,438	0.26	5,097	54,164	0.09	2,318	0.45
Moraine Park	3,603	16,482	0.22	830	0.23	2,668	16,619	0.16	693	0.26
Lakeshore	1,360	18,487	0.07	589	0.43	2,827	16,776	0.17	550	0.19
Fox Valley	4,213	40,068	0.11	1,058	0.25	2,852	40,077	0.07	1,066	0.37
Northeast	5,072	37,287	0.14	1,077	0.21	3,608	37,413	0.10	1,098	0.30
Mid-State	2,873	9,994	0.29	566	0.20	2,526	10,197	0.25	532	0.21
North Central	4,055	17,135	0.24	800	0.20	3,331	16,694	0.20	778	0.23
Nicolet	1,221	8,130	0.15	178	0.15	870	8,113	0.11	142	0.16
Indianhead	4,180	18,423	0.23	910	0.22	3,780	19,493	0.19	952	0.25
State Totals	72,022	366,060	0.20	15,238	0.21	54,144	367,521	0.15	14,457	0.27

Source: VTAE Student Accounting System
MATC Research, Planning, and Development
DR:jm December 1988

NOTE: State VTAE changed from program (students with a specific program code) and course enrollments to full time (24 or more credits annually) and part time in 1987-88.

GRAPH 1B

RATIO PROGRAM ENROLLMENT TO COURSE ENROLLMENT 1986-87
RATIO FULL-TIME ENROLLMENT TO PART-TIME ENROLLMENT 1987-88



State FTE and Headcounts by Aid Code

Table 1C shows the Headcount and FTE changes by Aid Code from 1979-80 to 1987-88. Associate degree, college parallel, and codes 11, 30, 31, 32 Vocational are not included because program FTEs in these categories are not comparable to course FTEs used in other sections of this report.

1. Headcounts have declined 7.0% while FTEs increased 3.8% from 1979-80 to 1987-88.

2. Government JTPA or ABE programs are down significantly from 1979-80 to 1987-88:

   Code 39 CETA or JTPA 6,538 to 694 headcount
   Code 38 ABE 11,350 to 6,533 headcount

3. GOAL enrollments increased from 7,303 to 22,066 headcount from 1979-80 to 1987-88.

4. General Adult, which includes about 12% basic skills training, is up from 70,915 to 78,076 from 1979-80 to 1987-88.

5. Avocational is down from 90,080 to 40,408 from 1979-80 to 1987-88.

6. Vocational-Adult headcounts began and ended the eight-year period with similar counts (242,128 and 242,347) while Community Service enrollments went down significantly (129,621 to 64,443).

7. Occupational Adult, a category which was not used in 1979-80, had 155,649 headcount in 1987-88 which represented 36.9% of the total unduplicated headcount of 421,666 in 1987-88.

Enrollment by Sex, Ethnic Origin, Handicapped, and Disadvantaged by District

Table 1D shows FTE, Total Headcount, Male, Female, Ethnic Group, Handicapped, Limited English Proficiency, and Total Disadvantaged (unduplicated count of economic, academic, and LEP enrollments) by district for 1986-87 and 1987-88. Some highlights for 1987-88 are as follows:

1. Thirteen (13) of 16 districts have a majority of women students. Nicolet with 61.1% female has the highest percentage in 1987-88. Fox Valley with 47.6% female had the lowest (Graph 1C).

2. Milwaukee (13,861 minority students) had 55% of the minority enrollment of 25,361 in 1987-88. A total of 23.4% of MATC-Milwaukee headcount enrollment was minority, including 10,416 blacks which represented 75% of black enrollment in the state (Graph 1C).

3. Indianhead had the highest number of American Indian students with 488 in 1987-88.

4. With the exception of Gateway with 10.3% and Milwaukee with 23.4% minority, all other districts had less than 4.5% minority enrollment.

TABLE 1C
CHANGE IN CONTINUING EDUCATION HEADCOUNT AND FTE BY AID CODE
1979-80 TO 1987-88

AID CODE	1979-80 HEADCOUNT (HC)	1979-80 FTE	1979-80 HC/FTE	1987-88 HEADCOUNT (HC)	1987-88 FTE	1987-88 HC/FTE	% CHANGE 1979 to 1987 HC	% CHANGE 1979 to 1987 FTE
03 Preparatory Conf	2,246	25	89.84					
04 Extension Conf	6,096	51	119.53					
38 ABE	11,350	1,421	7.99	6,533	613	10.66	-42.4%	-56.9%
40 Extension	105,191	2,171	48.45	958	45	21.35	-99.1%	-97.9%
41 Part-Time Prep	29,871	873	34.22					
42 General Adult	70,915	1,507	47.06	78,076	1,766	44.21	10.1%	17.2%
43 Homemaking	51,855	934	55.52	10,942	299	36.58	-78.9%	-68.0%
47 Occup Adult				155,649	3,498	44.49		
70 HS Courses	3,410	133	25.64	911	80	11.34	-73.3%	-39.8%
Vocational-Adult	242,128	7,114 *	34.04	242,347	6,301 *	38.46	0.1%	-11.4%
00 Workshops	38,619	294	131.36	19,868	134	147.90	-48.6%	-54.4%
02 Contract Service	2,137	28	76.32	2,603	28	93.97	21.8%	0.0%
44 Driv Ed-Theory	2,455	46	53.37	247	5	50.10	-89.9%	-89.1%
45 Behind-the-Wheel	3,272	27	121.19	555	3	181.96	-83.0%	-88.9%
91 HS Contract	2,147	397	5.41	87	10	9.06	-95.9%	-97.5%
Cooperative Service	48,630 **	792 *	61.40	23,102	180 *	128.60	-52.5%	-77.3%
01 Workshops	2,202	68	32.38	997	38	25.99	-54.7%	-44.1%
60 Avocational	90,080	2,006	44.91	40,408	945	42.75	-55.1%	-52.9%
District Service	92,282 **	2,074 *	44.49	41,341	984 *	42.03	-55.2%	-52.6%
Community Service	129,621	2,866 *	45.23	64,443	1,164 *	55.36	-50.3%	-59.4%
GRAND TOTAL	453,371	54,550 *		421,666	56,618 *		-7.0%	3.8%

*FTE within aid categories is based upon course and program code.
Total FTE includes postsecondary enrollments which are not shown in this table.
FTE in other tables and in total represents course FTEs.

**Duplicated headcount. Total headcount includes postsecondary.

NOTE: FTEs are counted by programs and courses. For example: a district submits an FTE record for a student in a diploma course. This record also indicates that the student is in an Associate Degree program. On a course basis FTE summary, the FTEs will be counted as Vocational and Associate Degree based upon the courses. In this summary, the FTEs will be combined based on the program code and will be counted in the Associate Degree aid category.

TABLE 1D
ENROLLMENT BY DISTRICT, SEX, ETHNIC ORIGIN, HANDICAPPED,
LIMITED ENGLISH PROFICIENCY, AND DISADVANTAGED
1986-87 SCHOOL YEAR

District	FTE	Total Headct	Male	Female	% Female	Indian	Asian	Black	Hispanic	% Minority	Handicapped		LEP		Total Disadvantaged	
											No.	%	No.	%	No.	
Chippewa Valley	3,454	26,898	12,345	14,553	54.1%	47	213	22	40	1.2%	564	2.1%	180	0.7%	3,733	13.9%
Western	3,210	20,188	9,671	10,515	52.1%	30	72	103	30	1.2%	377	1.9%	349	1.7%	2,277	11.3%
Southwest	1,403	12,313	5,434	6,879	55.9%	6	22	3	8	0.3%	88	0.7%	0	0.0%	1,423	11.6%
Madison	6,999	45,274	22,730	22,188	49.0%	242	340	495	337	3.1%	68	0.2%	408	0.9%	3,738	8.3%
Blackhawk	1,585	12,959	6,310	6,649	51.3%	16	59	274	59	3.1%	84	0.6%	86	0.7%	2,266	17.5%
Gateway	4,529	32,562	15,297	17,265	53.0%	94	107	1,874	921	9.2%	404	1.2%	136	0.4%	5,436	16.7%
Waukesha	3,493	34,377	16,671	17,706	51.5%	38	97	129	224	1.4%	981	2.9%	275	0.8%	4,010	11.7%
Milwaukee	12,963	60,928	28,474	32,006	52.5%	401	1,154	10,045	1,776	22.0%	1,210	2.0%	1,016	1.7%	13,198	21.7%
Moraine Park	2,575	20,085	9,313	10,772	53.6%	62	83	33	84	1.3%	658	3.3%	91	0.5%	2,405	12.0%
Lakeshore	1,964	19,847	9,499	10,348	52.1%	25	501	6	137	3.4%	201	1.0%	460	2.3%	2,963	14.9%
Fox Valley	4,265	44,281	21,726	22,555	50.9%	254	413	122	117	2.0%	180	0.4%	0	0.0%	4,408	10.0%
Northeast	4,015	42,359	19,326	23,033	54.4%	350	258	25	70	1.7%	420	1.0%	203	0.5%	4,051	9.6%
Mid-State	1,723	12,867	6,236	6,631	51.5%	88	86	20	61	2.0%	624	4.8%	69	0.5%	1,870	14.5%
North Central	2,474	21,190	9,501	11,689	55.2%	341	313	16	64	3.5%	577	2.7%	180	0.8%	4,560	21.5%
Nicolet	923	9,351	3,444	5,438	58.2%	221	22	25	16	3.0%	260	2.8%	0	0.0%	956	10.2%
Indianhead	2,304	22,603	9,415	13,188	58.3%	405	56	41	19	2.3%	228	1.0%	15	0.07%	3,295	14.6%
State Totals	58,079	438,082	205,392	231,415	52.8%	2,620 0.6%	3,796 0.9%	13,233 3.0%	3,963 0.9%	5.4%	6,924	1.6%	3,468	0.8%	60,589	13.8%

Source: VTAE Student Accounting System
MATC Research, Planning, and Development
DR:jm December 1988

NOTE: Minority enrollment was NOT adjusted for those students whose race was not known. Some districts have significant numbers of students whose race is not identified.

TABLE 10 (Continued)
ENROLLMENT BY DISTRICT, SEX, ETHNIC ORIGIN, HANDICAPPED,
LIMITED ENGLISH PROFICIENCY, AND DISADVANTAGED
1987-88 SCHOOL YEAR

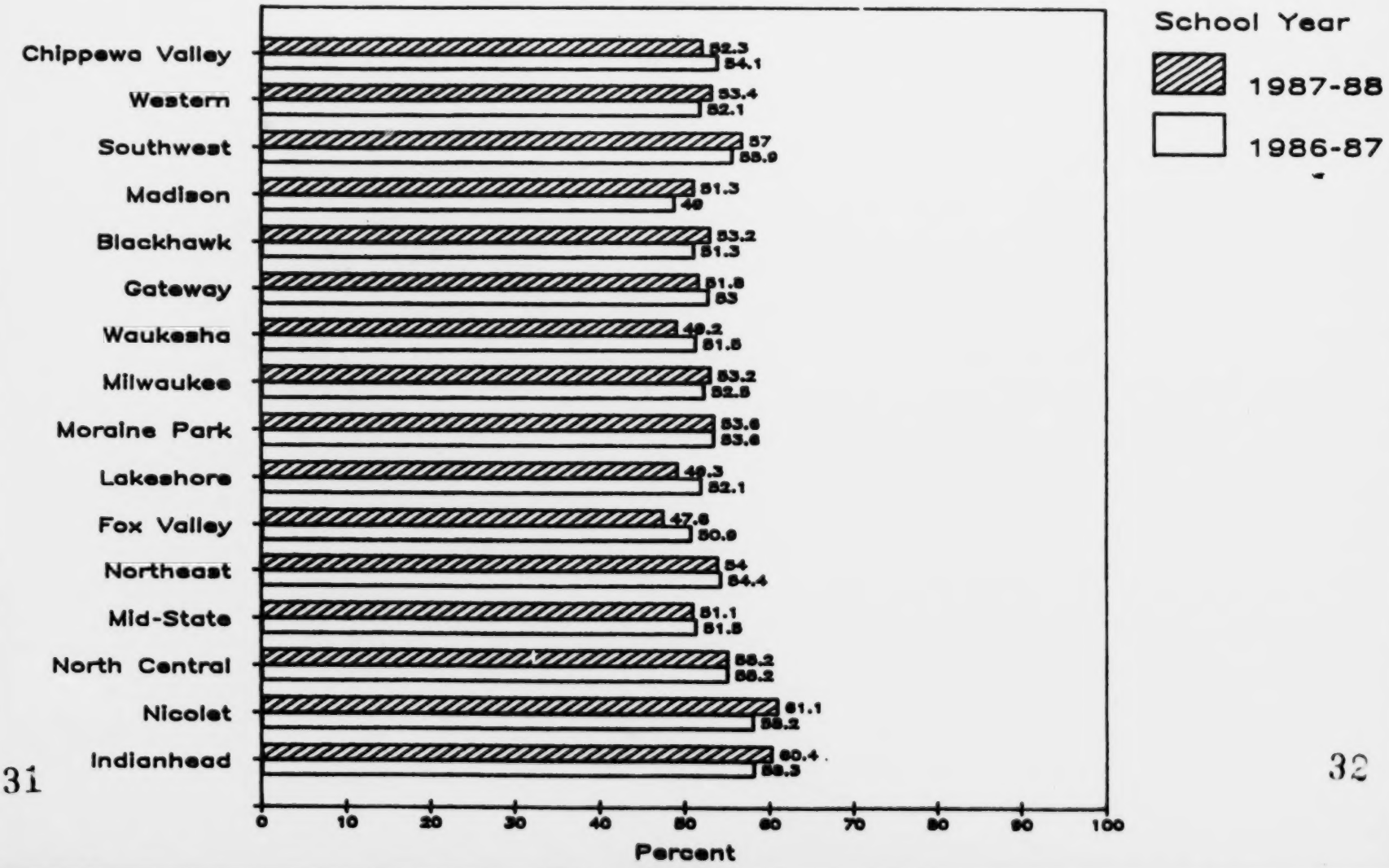
District	FTE	Total Headct	Male	Female	% Female	Indian	Asian	Black	Hispanic	% Minority	Handicapped No.	Handicapped %	LEP No.	LEP %	Total Disadvantaged No.	Total Disadvantaged %
Chippewa Valley	3,395	25,698	12,261	13,437	52.3%	61	278	16	36	1.5%	462	1.8%	204	0.8%	4,605	17.9%
Western	3,150	18,954	8,828	10,120	53.4%	37	392	119	37	3.1%	293	1.5%	361	1.9%	3,870	20.4%
Southwest	1,206	11,452	4,925	6,527	57.0%	14	18	8	11	0.4%	91	0.8%	10	0.1%	1,271	11.1%
Madison	7,246	45,125	19,384	23,132	51.3%	168	438	614	414	3.6%	377	0.8%	395	0.9%	3,979	8.8%
Blackhawk	1,620	12,441	5,825	6,616	53.2%	14	68	206	49	2.7%	186	1.5%	120	1.0%	2,070	16.6%
Gateway	4,036	28,940	13,955	14,985	51.8%	111	159	1,767	937	10.3%	630	2.2%	192	0.7%	5,228	18.1%
Waukesha	3,204	31,951	16,246	15,705	49.2%	58	150	180	318	2.2%	1,045	3.3%	311	1.0%	2,917	9.1%
Milwaukee	12,551	59,261	27,474	31,531	53.2%	383	1,269	10,416	1,793	23.4%	1,101	1.9%	1,019	1.7%	13,557	22.9%
Moraine Park	2,406	19,287	8,952	10,335	53.6%	40	72	36	92	1.2%	340	1.8%	74	0.4%	2,362	12.2%
Lakeshore	2,004	19,603	9,933	9,670	49.3%	20	495	8	120	3.3%	175	0.9%	486	2.5%	2,731	13.9%
Fox Valley	4,258	42,929	22,509	20,420	47.6%	319	456	278	144	2.8%	350	0.8%	433	1.0%	4,339	10.1%
Northeast	3,986	41,021	18,867	22,154	54.0%	316	277	20	67	1.7%	331	0.8%	206	0.5%	4,526	11.0%
Mid-State	1,719	12,723	6,227	6,496	51.1%	107	91	23	52	2.1%	671	5.3%	74	0.6%	1,853	14.6%
North Central	2,404	20,025	8,966	11,059	55.2%	454	379	10	20	4.3%	430	2.1%	236	1.2%	3,727	18.6%
Nicolet	875	8,983	3,440	5,493	61.1%	205	19	72	15	3.5%	255	2.8%	0	0.0%	987	11.0%
Indianhead	2,560	23,273	9,209	14,064	60.4%	488	45	60	22	2.6%	404	1.7%	13	0.06%	2,995	12.9%
State Totals	56,618	421,665	197,001	221,743	52.6%	2,795 0.7%	4,606 1.1%	13,833 3.3%	4,127 1.0%	6.0%	7,141	1.7%	4,134	1.0%	61,017	14.5%

Source: VTAE Student Accounting System
MATC Research, Planning, and Development
DR:jm December 1988

NOTE: Minority enrollment was NOT adjusted for those students whose race was not known.
Some districts have significant numbers of students whose race is not identified.

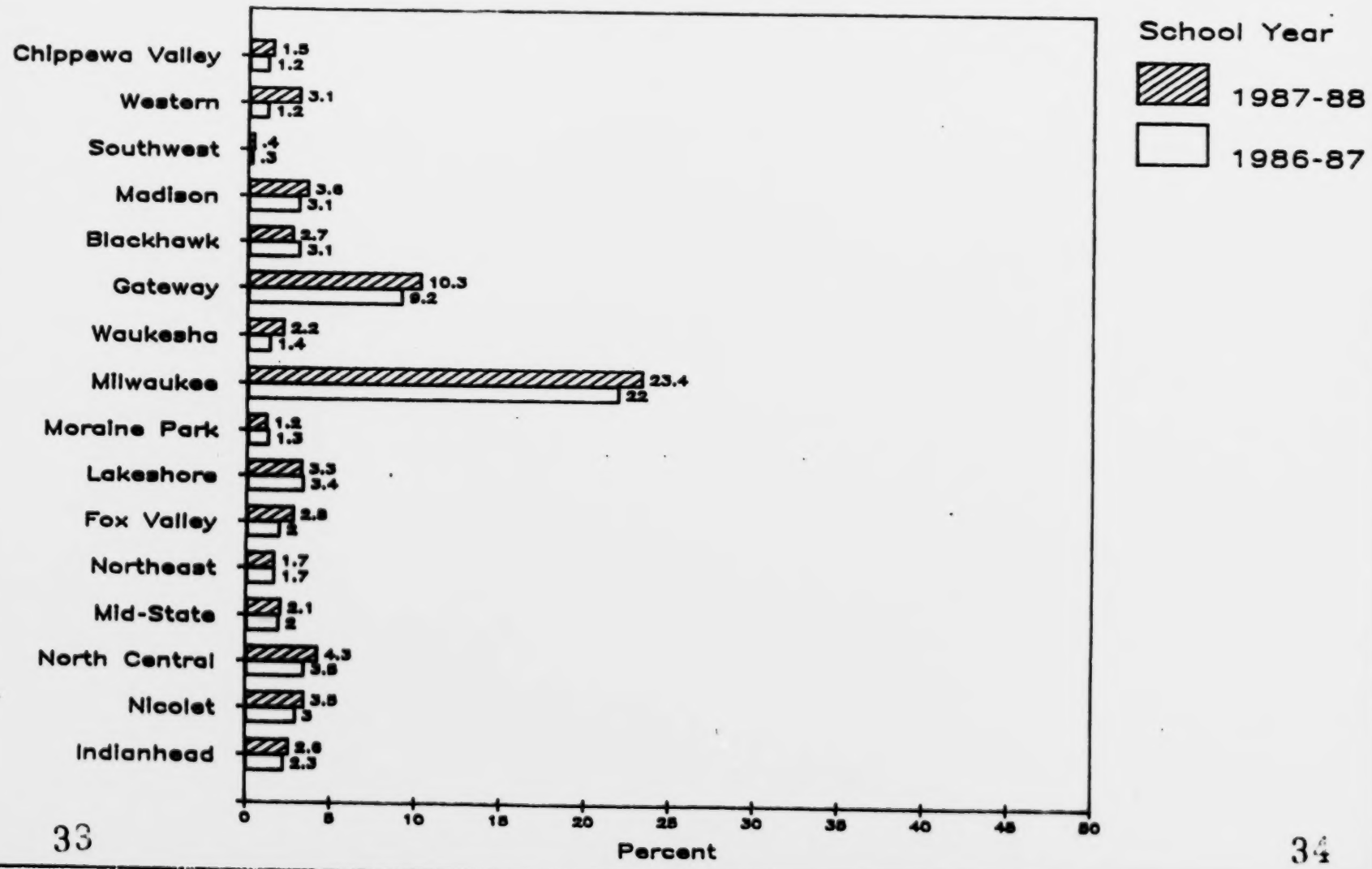
GRAPH 1C

Headcount
Percent Female Enrollment
By District 1987-88 and 1986-87



GRAPH 1C (Continued)

Headcount
Percent Minority Enrollment
By District 1987-88 and 1986-87



Comparison of Percentage of Total Enrollment by Aid Code for Statewide Headcount and FTE

	1979-80				1987-88			
	Headcount		FTE		Headcount		FTE	
	No.	% of Total	No.	% of Total	No.	% of Total	No.	% of Total
College Parallel	8,974	1.5%	1,858	3.4%	7,659	1.7%	2,539	4.5%
Associate Degree	73,488	12.6%	25,276	46.3%	81,166	17.5%	30,868	54.5%
Vocational	80,745	13.8%	17,038	31.2%	66,953	14.5%	15,430	27.2%
Vocational-Adult	280,934	48.0%	7,419	13.6%	242,347	52.4%	6,614	11.7%
Community Service	140,912	24.1%	2,959	5.5%	64,443	13.9%	1,196	2.1%
TOTAL	585,053*	100%	54,550	100%	462,569*	100%	56,648	100%

*Duplicated headcount.

Significant differences in headcount and FTE enrollments are:

1. College Parallel enrollments represented only 1.5% and 1.7% of headcount enrollments in 1979-80 and 1987-88, respectively, and 3.4% and 4.5% of FTEs the same years.

2. Associate Degree headcounts represent a relatively small percentage of headcount enrollment (12.6% in 1979-80 and 17.5% in 1987-88) but a majority of FTEs (46.3% and 54.5%).

3. Vocational headcount enrollments account for about twice the FTE enrollment (27.2% in 1987-88) as headcount (14.5%).

4. Vocational-Adult enrollments are stable but still represented 52.4% of headcount enrollment in 1987-88 while accounting for only 11.7% of FTEs. More than one-half of these enrollments are in code 47 (occupational adult) 155,649 out of 242,347 in 1987-88.

5. Community Service enrollments are declining and represent only 2.1% of FTEs and 13.9% of headcount enrollments in 1987-88.

ADULT BASIC EDUCATION
Federal Program Enrollments
1979-80 and 1987-88

1979-80				1987-88			
Rank Order by FTE	District	Headcount	FTE	Rank Order by FTE	District	Headcount	FTE
1	Fox Valley	2,123	335	1	Madison	1,318	171
2	Milwaukee	1,466	331	2	Milwaukee	1,363	158
3	Northeast	1,036	201	3	Chippewa Valley	1,991	155
4	Gateway	1,633	175	4	Indianhead	587	49
5	Blackhawk	1,188	104	5	Northeast	427	29
6	Madison	817	89	6	Southwest	264	22
7	Chippewa Valley	1,100	71	7	North Central	362	18
8	Indianhead	589	45	8	Blackhawk	113	6
9	Waukesha	521	30	9	Gateway	100	4
10	Nicolet	427	19	10	Waukesha	8	0.3
11	North Central	224	11				
12	Southwest	226	9		Western	0	0
					Moraine Park	0	0
	Western	0	0		Lakeshore	0	0
	Moraine Park	0	0		Mid-State	0	0
	Lakeshore	0	0		Fox Valley	0	0
	Mid-State	0	0		Nicolet	0	0
	TOTALS	11,350	1,421			6,533	613
						-42%	-57%

All districts have ABE federal programs. However, 4 districts in 1979-80 and 6 districts in 1987-88 are not showing these enrollments as State Code 38.

1. Fox Valley, which had the highest headcount and FTE enrollment in 1979-80, has 0 ABE enrollment in 1987-88.

2. Madison had the highest ABE FTE 171 in 1987-88 but Chippewa Valley had the highest headcount of 1,991 which is 628 higher than Milwaukee with 1,363.

ADULT HIGH SCHOOL OR HIGH SCHOOL COURSES

Milwaukee is the only district that has an Adult High School (State Code 34). Other districts offer high school courses that may be used as credits toward graduation from high schools. Significant changes in enrollment have taken place from 1979-80 to 1987-88 in these enrollments.

	High School Course Enrollments			
	1979-80		1987-88	
	Hdct	FTE	Hdct	FTE
Milwaukee	6,688	577.56	2,524	751.66
Other 15 Districts	3,411	133.10	911	80.27
TOTAL	10,099	710.66	3,435	831.93

From 1979-80 to 1987-88:
Milwaukee headcounts have decreased (4,164 or -62%).
Milwaukee FTE has increased (174 or 30%).
Other 15 districts' headcount decreased (2,500 or 73%).
Other 15 districts' FTE decreased (53 or 40%).

FTE and Costs by State Code 1979-80 to 1987-88

Table 2 and Graph 2 show Operational Costs and Cost/FTE by Aid Category for all districts from 1979-80 to 1987-88. Trends in FTE by aid category are shown in Graph 2 to 1987-88. Some trends indicated from 1979-80 to 1987-88 are as follows:

1. The percentage of Associate Degree enrollments has increased from 46% of total FTE (25,276 out of 54,550) in 1979-80 to 54% (30,868 out of 56,648) in 1987-88.

2. College Parallel and Associate Degree enrollments have increased 37% and 22% respectively while Vocational, Vocational-Adult, and Community Services have decreased 9.4%, 14%, and 51% respectively. Total FTE enrollment increased 3.5% over the eight-year period.

3. Costs per FTE have increased more rapidly for College Parallel (+108%), Associate Degree (+93%), and Vocational (+107%) than for Vocational-Adult (+44%) while Community Services costs increased slightly (3%). Overall costs per FTE increased 81%.

FTE and Costs by Instructional Division 1979-80 to 1987-88

Table 3 shows Direct Costs, FTE, and Cost/FTE for all Districts from 1979-80 to 1987-88. Table 3A and Graph 3 show FTE enrollment trends by instructional division from 1979-80 to 1987-88. Some trends indicated during this eight-year period are as follows:

1. General Education generated more FTEs 20,807 in 1987-88 (37% of total) than any other division. Business with 15,396 in 1987-88 produced 27% of total FTEs and is second highest. General Education and Business FTEs have increased 16% and 18% respectively from 1979-80 to 1987-88.

2. The Technical division FTEs had the highest percentage increase (40%) (Television excepted). Technical FTEs increased from 2,245 in 1979-80 to 3,153 in 1987-88. However, Technical FTEs declined from 1986-87 to 1987-88.

3. Five divisions decreased in FTE from 1979-80 to 1987-88: Service and Health 2%, Graphic 13%, Home Economics 22%, Agriculture 26%, and Industrial 31%.

4. Direct Instructional Costs for the Technical division increased 144% as compared to total instructional costs of 113% for all divisions.

5. Costs (113%) and Costs/FTE (105%) increased at a faster rate than FTEs over the eight-year period from 1979-80 to 1987-88. FTEs had increased 4% to 1987-88.

TABLE 2

OPERATIONAL COSTS AND COST/FTE BY AID CATEGORY
1979-80 to 1987-88 and FTE to 1987-88
FOR ALL DISTRICTS

	COLLEGE PARALLEL			ASSOCIATE DEGREE			VOCATIONAL		
Year	Operational Costs	FTE	Cost/ FTE	Operational Costs	FTE	Cost/ FTE	Operational Costs	FTE	Cost/ FTE
1979-80	$3,633,905	1,858	$1,956	$66,612,280	25,276	$2,635	$61,648,940	17,038	$3,618
1980-81	$4,125,018	1,998	$2,065	$79,067,379	28,927	$2,733	$70,152,896	18,439	$3,805
1981-82	$4,426,095	2,030	$2,180	$90,245,330	31,542	$2,861	$78,953,462	19,630	$4,022
1982-83	$6,140,458	2,146	$2,861	$107,451,451	33,563	$3,201	$89,840,203	19,261	$4,664
1983-84	$6,733,558	2,195	$3,068	$119,456,295	33,830	$3,531	$94,494,398	18,165	$5,202
1984-85	$7,030,430	2,150	$3,270	$129,770,616	31,681	$4,096	$96,018,201	16,640	$5,770
1985-86	$8,282,513	2,130	$3,889	$143,850,152	31,008	$4,639	$102,025,426	16,277	$6,268
1986-87	$9,677,850	2,275	$4,254	$148,800,150	31,195	$4,770	$109,502,712	16,266	$6,732
1987-88	$10,332,649	2,539	$4,069	$157,407,205	30,868	$5,099	$115,564,863	15,430	$7,490
Change 1979-80 to 1987-88	$6,698,744 +184%	681 +37%	$2,113 +108%	$90,794,925 +136%	5,592 +22%	$2,464 +93%	$53,915,923 +87%	(1,608) -9.4%	$3,872 +107%

TABLE 2 (Continued)

Operational Costs and Cost/FTE by Aid Category
1979-80 to 1987-88 and FTE to 1987-88
for All Districts

Year	VOCATIONAL-ADULT Operational Costs	FTE	Cost/ FTE	COMMUNITY SERVICES Operational Costs	FTE	Cost/ FTE	TOTAL Operational Costs	FTE	Cost/ FTE
1979-80	$30,403,259	7,419	$4,098	$11,857,711	2,959	$4,008	$174,156,095	54,550	$3,193
1980-81	$30,548,449	7,014	$4,355	$14,163,548	3,212	$4,410	$198,057,290	59,590	$3,324
1981-82	$30,200,886	6,598	$4,577	$12,918,872	2,891	$4,469	$216,744,645	62,691	$3,457
1982-83	$24,389,562	6,668	$3,658	$9,265,191	2,665	$3,477	$237,086,865	64,303	$3,687
1983-84	$28,017,186	6,969	$4,020	$8,552,738	2,352	$3,636	$257,254,175	63,511	$4,051
1984-85	$29,726,299	6,681	$4,449	$9,108,004	2,232	$4,081	$271,653,550	59,384	$4,575
1985-86	$35,076,136	6,750	$5,196	$6,556,054	1,772	$3,700	$295,790,281	57,936	$5,105
1986-87	$38,072,490	6,945	$5,482	$5,419,084	1,411	$3,841	$311,472,286	58,091	$5,362
1987-88	$39,046,475	6,614	$5,903	$4,818,905	1,196	$4,113	$327,170,097	56,648	$5,776
Change 1979-80 to 1987-88	$8,643,216 +28%	(805) -11%	$1,805 +44%	($7,038,806) -59%	(1,763) -60%	$105 +3%	$153,014,002 +88%	2,098 +3.8%	$2,583 +81%

GRAPH 2
FTE BY AID CATEGORY
1979-80 to 1987-88

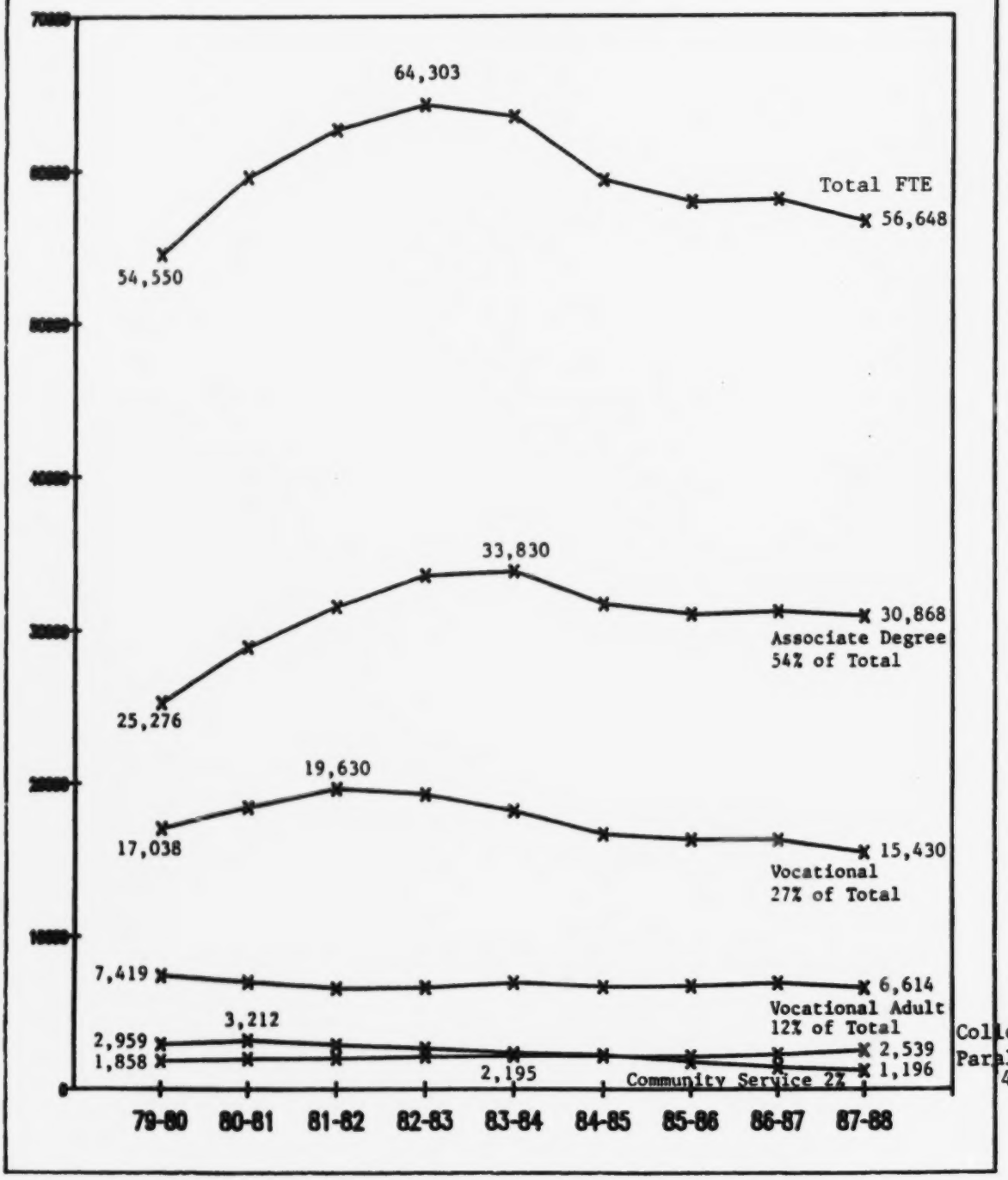


TABLE 3

DIRECT INSTRUCTIONAL COSTS, FTE, AND COST/FTE BY INSTRUCTIONAL DIVISION
1979-80 TO 1987-88 FOR ALL DISTRICTS

Division	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	Change 1979-80 to 1987-88
AGRICULTURE										
Direct Costs	5,112,370	5,740,027	6,166,656	6,692,134	7,067,342	7,412,114	7,765,178	7,805,070	7,969,599	56%
FTE	1,173.1	1,177.2	1,294.7	1,251.1	1,261.8	1,160.5	1,081.2	953	869	-26%
Direct Cost/FTE	4,358	4,876	4,763	5,349	5,601	6,387	7,182	8,190	9,171	110%
BUSINESS										
Direct Costs	19,749,592	22,497,785	25,944,472	30,194,419	33,749,980	35,990,350	37,723,330	41,158,824	42,847,068	117%
FTE	13,079.2	14,514.7	15,819.8	17,244.1	17,660.9	16,631.4	16,011.6	15,806	15,396	18%
Direct Cost/FTE	1,510	1,550	1,640	1,751	1,911	2,164	2,356	2,604	2,783	84%
GRAPHICS										
Direct Costs	2,691,779	3,060,306	3,446,798	3,435,731	3,539,180	3,740,581	4,246,202	4,408,069	4,811,100	79%
FTE	1,167.8	1,233.0	1,306.1	1,292.6	1,276.3	1,157.0	1,094.1	1,093	1,015	-13%
Direct Cost/FTE	2,305	2,482	2,639	2,658	2,773	3,233	3,881	4,033	4,740	106%
HOME ECONOMICS										
Direct Costs	6,329,580	7,086,211	7,363,920	7,819,457	8,282,228	8,568,244	8,624,031	8,914,512	9,099,454	44%
FTE	2,888.9	3,164.9	3,068.3	3,050.9	2,913.2	2,794.6	2,580.5	2,433	2,249	-22%
Direct Cost/FTE	2,191	2,239	2,400	2,563	2,843	3,066	3,342	3,664	4,046	85%
INDUSTRIAL										
Direct Costs	25,081,738	27,333,070	29,028,964	29,885,004	30,993,700	30,992,329	32,158,125	33,685,374	35,926,950	43%
FTE	8,977.0	8,994.1	8,861.1	8,497.3	7,721.4	6,983.4	6,850.9	6,729	6,205	-31%
Direct Cost/FTE	2,794	3,039	3,276	3,517	4,014	4,438	4,694	5,006	5,790	107%

Note: Direct costs include only instructional costs; instructional resources, student services, research, general administration, general institutional, and physical plant are not included.

Table 3

Direct Instructional Costs, FTE, and Cost/FTE by Instructional Division
1979-80 to 1987-88 for All Districts

Division	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	Change 1979-80 to 1987-88
SERVICE & HEALTH										
Direct Costs	23,898,985	27,414,241	30,037,260	32,566,860	36,879,040	37,979,705	38,971,387	39,802,355	41,879,408	75%
FTE	7,008.5	7,265.9	7,810.0	8,041.2	8,036.4	7,374.7	7,076.7	6,989	6,896	-2%
Direct Cost/FTE	3,410	3,773	3,846	4,050	4,589	5,150	5,507	5,695	6,073	78%
TECHNICAL										
Direct Costs	5,848,746	6,714,303	7,653,040	8,954,219	9,869,598	11,107,111	13,197,783	14,306,356	14,289,396	144%
FTE	2,245.2	2,587.4	2,824.0	2,938.7	2,968.3	2,972.2	3,155.1	3,236	3,153	40%
Direct Cost/FTE	2,605	2,595	2,710	3,047	3,325	3,737	4,183	4,421	4,532	74%
TELEVISION										
Direct Costs	87,780	98,325	133,348	116,486	138,047	157,290	282,596	174,513	211,352	141%
FTE	28.0	37.4	42.4	43.4	37.3	41.1	43.0	57.5	58	107%
Direct Cost/FTE	3,135	2,629	3,145	2,684	3,701	3,827	6,572	3,035	3,644	16%
GENERAL EDUCATION										
Direct Costs	28,736,674	34,015,575	36,808,495	40,052,910	42,454,737	45,442,425	49,884,040	55,187,276	57,489,741	100%
FTE	17,982.9	20,615.5	21,664.8	21,946.8	21,638.5	20,268.7	20,041.8	20,794	20,807	16%
Direct Cost/FTE	1,598	1,650	1,699	1,825	1,962	2,242	2,489	2,654	2,763	73%
TOTAL INSTRUCTION*										
Direct Costs	117,556,543	133,958,545	146,572,026	159,729,149	172,996,064	181,416,898	192,864,616	240,903,377	250,554,104	113%
FTE	54,550.6	59,590.1	62,691.2	64,303.2	63,508.1	59,383.6	57,934.7	58,091	56,648	4%
Direct Cost/FTE	2,155	2,248	2,338	2,484	2,724	3,055	3,329	4,147	4,423	105%

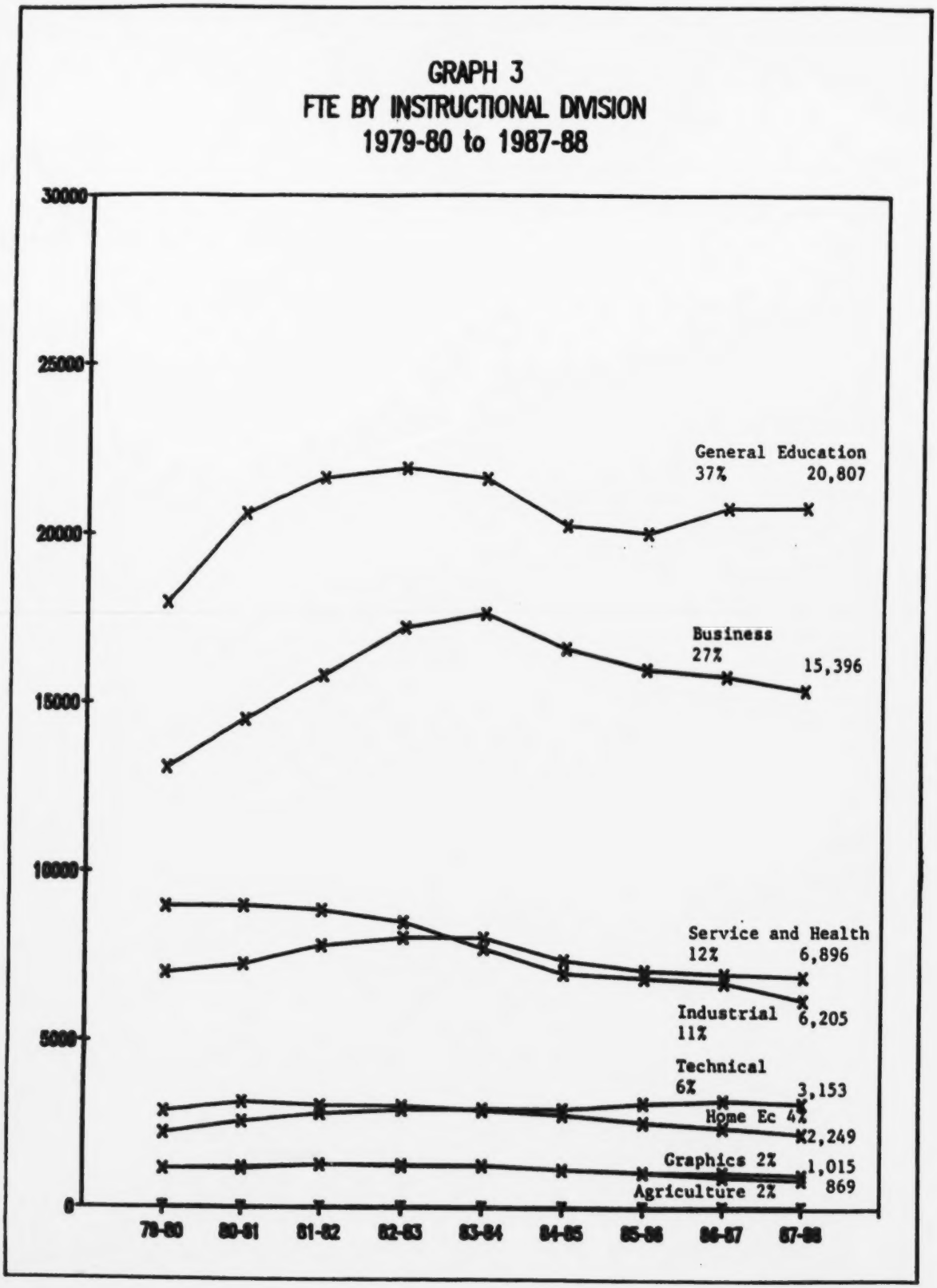
*Includes direct instructional costs, instructional resources, and student services.

TABLE 3A

CHANGE IN FTE ENROLLMENT BY INSTRUCTIONAL DIVISION
1979-80 to 1987-88

Division	1979-80	% of Total	1987-88	% of Total	Change No.	Change %
Agriculture	1,173	2.2%	869	1.5%	(304)	-25.9%
Business	13,079	24.0%	15,396	27.2%	2,317	17.7%
Graphic and Applied Arts	1,168	2.1%	1,015	1.8%	(153)	-13.1%
Home Economics	2,889	5.3%	2,249	4.0%	(640)	-22.2%
Industrial	8,977	16.5%	6,205	11.0%	(2,772)	-30.9%
Service and Health	7,008	12.8%	6,896	12.2%	(112)	-1.6%
Technical	2,245	4.1%	3,153	5.6%	908	40.4%
Television	28	0.1%	57.7	0.1%	29.7	106.1%
General Education	17,983	33.0%	20,807	36.7%	2,824	15.7%
TOTAL	54,550	100.0%	56,648	100.0%	2,098	3.8%

Source: 1979-80 and 1987-88 State VTAE Cost Allocation


GRAPH 3
FTE BY INSTRUCTIONAL DIVISION
1979-80 to 1987-88
30000
25000
20000
15000
10000
5000
0
General Education
37%
20,807
Business
27%
15,396
Service and Health
12%
6,896
Industrial
11%
6,205
Technical
6%
3,153
Home Ec 4%
2,249
Graphics 2%
1,015
Agriculture 2%
869
79-80
80-81
81-82
82-83
83-84
84-85
85-86
86-87
87-88

III. ANALYSIS OF VTAE GRADUATES 1975-76 TO 1987-88

Table 4 and Graph 4 show trends in graduates from 1975-76 to 1987-88. Some trends are as follows:

1. The number of graduates has increased in seven years and decreased in five years over the twelve-year period. The largest percentage change was a 12% increase in 1978-79. The largest decrease was 10.7% in 1984-85. This also represents the largest change in numbers from 16,622 graduates in 1983-84 to 14,844 in 1984-85 (-1,778).

2. The proportion of graduates by aid category to total has been changing from 1975-76 to 1987-88.

   a. Associate Degree increased from 38.8% (4,373) of total graduates to 49.5% (6,834).

   b. Two-year and one-year diploma decreased from 6.0% (676) to 5.2% (712) and 43.0% (4,847) to 28.5% (3,930), respectively.

   c. Short-term graduates increased from 12.2% (1,376) to 16.9% (2,328) of total in 1987-88 but peaked in 1981-82 at 17.8% (2,763) of total.

Table 5 shows the trends from 1975-76 to 1987-88 of programs with more than 100 graduates per year. Some highlights are as follows:

1. The 39 programs with 100 or more graduates at any time over the 12-year period represent 13% of the 289 degree, diploma, or certificate programs with graduates in 1987-88. These 39 programs contributed 62% of the total 13,804 graduates in 1987-88. The 39 programs had more than 60% of the total graduates in most years since 1974-75.

2. The Business Division produces more graduates from programs with more than 100 graduates than any other division (3,177 in 1987-88).

3. The Nursing Assistant program produces more graduates than any other individual program, 1,158 in 1987-88. This one program produced more graduates in 1987-88 than the 107 new programs started since 1980 in the VTAE System (878 graduates).

TABLE 4

NUMBER OF STATE VTAE GRADUATES BY AID CATEGORY*
1975-76 to 1987-88

Year	10 Associate Degree		32 2-Year Diploma		31 1-Year Diploma		30 Short Term		Total Graduated	Change Each Year Total Graduated
	#	%	#	%	#	%	#	%	#	%
1975-76	4,373	38.8%	676	6.0%	4,847	43.0%	1,376	12.2%	11,272	-
1976-77	4,827	39.3%	642	5.2%	4,946	40.3%	1,859	15.1%	12,274	8.9%
1977-78	4,810	41.5%	589	5.1%	4,769	41.2%	1,415	12.2%	11,583	-5.6%
1978-79	5,454	42.0%	644	5.0%	5,133	39.6%	1,745	13.4%	12,976	12.0%
1979-80	5,242	41.5%	606	4.8%	4,735	37.5%	2,044	16.2%	12,627	-2.7%
1980-81	5,701	40.3%	670	4.7%	5,293	37.4%	2,482	17.5%	14,146	12.0%
1981-82	6,393	41.1%	712	4.6%	5,669	36.5%	2,763	17.8%	15,537	9.8%
1982-83	6,952	43.2%	764	4.7%	5,864	36.4%	2,531	15.7%	16,111	3.7%
1983-84	7,548	45.4%	815	4.9%	5,676	34.1%	2,583	15.5%	16,622	3.2%
1984-85	7,083	47.7%	662	4.5%	4,724	31.8%	2,375	16.0%	14,844	-10.7%
1985-86	7,038	48.5%	679	4.7%	4,629	31.9%	2,157	14.9%	14,503	-2.3%
1986-87	7,200	49.3%	726	5.0%	4,244	29.1%	2,421	16.6%	14,591	0.6%
1987-88	6,834	49.5%	712	5.2%	3,930	28.5%	2,328	16.9%	13,804	-5.4%

*Does not include Apprentices, JTPA (CETA) completers, or Associate in Arts.

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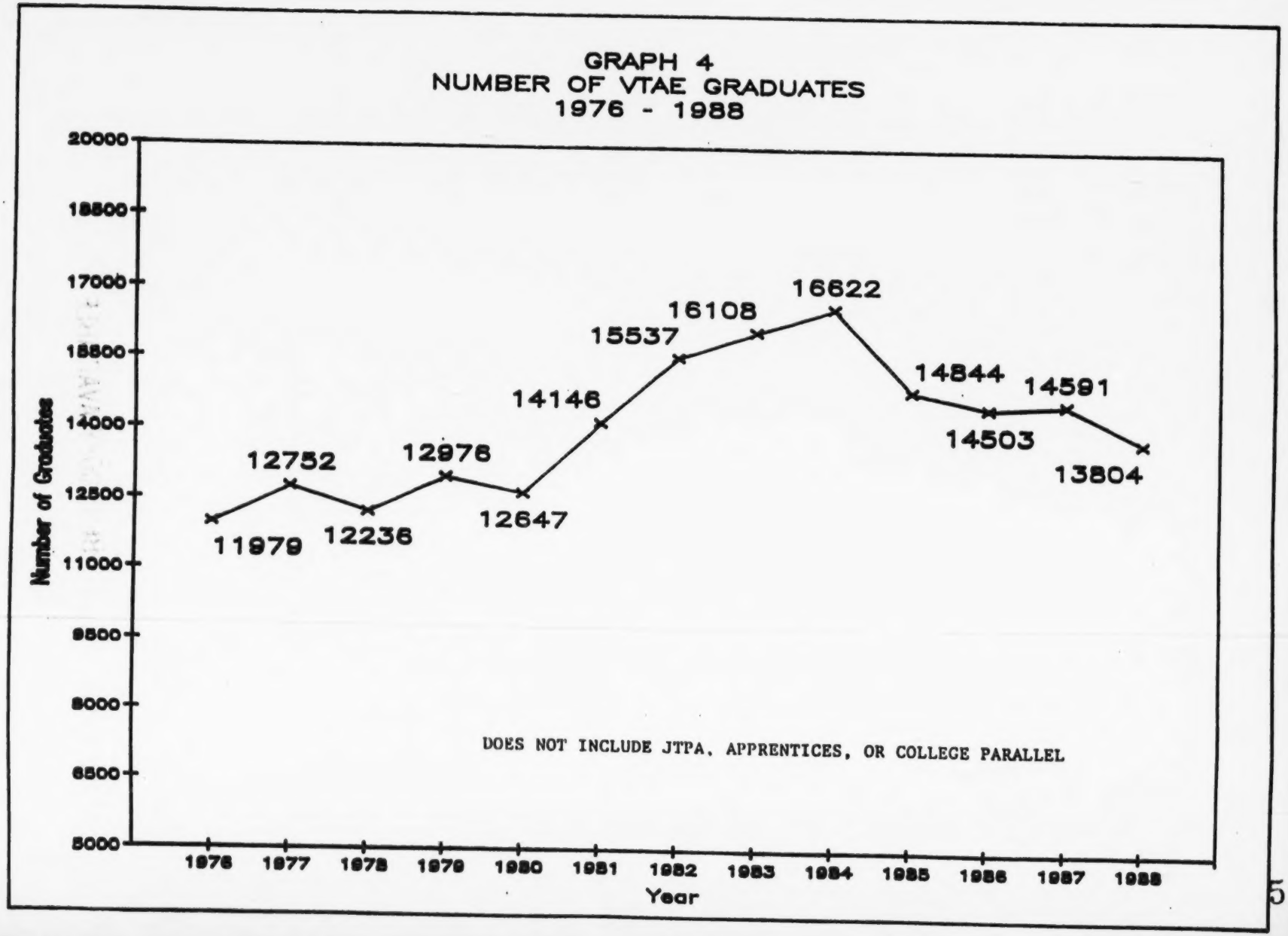
GRAPH 4
NUMBER OF VTAE GRADUATES
1976 - 1988
Number of Graduates
20000
18500
17000
15500
14000
12500
11000
9500
8000
6500
5000
11979
12752
12236
12976
12647
14146
15537
16108
16622
14844
14503
14591
13804
DOES NOT INCLUDE JTPA, APPRENTICES, OR COLLEGE PARALLEL
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year

TABLE 5

NUMBERS OF GRADUATES IN PROGRAMS WITH MORE THAN 100 GRADUATES PER YEAR
1975-76 to 1987-88

Rank 87-88	Division/Program	75-76	76-77	77-78	78-79	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88
	AGRICULTURE													
1	Farm Training 30-090-1	28	33	45	104	142	187	196	178	288	424	319	329	354
		28	33	45	104	142	187	196	178	288	424	319	329	354
	BUSINESS													
1	Accounting 10-101-1	579	665	594	608	649	732	760	895	935	843	881	899	820
2	Marketing 10-104-3	285	310	302	384	370	444	460	476	534	445	516	486	427
3	Data Processing 10-107-1	158	193	214	230	270	336	437	514	662	598	520	437	354
4	Account Clerk 31-101-1	176	180	196	226	213	207	278	235	269	261	285	249	252
5	Secretarial Science 10-106-2	232	207	195	233	242	244	218	279	322	288	291	361	248
6	Clerk Typist 31-106-1	271	209	287	315	283	321	314	313	350	321	356	332	232
7	Adm Asst Infor Processing 10-106-7	-	-	-	-	3	4	11	31	77	96	132	150	211
8	Word Processing Specialist 31-103-5	-	-	-	-	-	4	43	93	105	139	168	163	166
9	Business Mid Management 10-102-3	37	50	51	47	43	43	52	67	62	91	109	114	136
10	Fashion Merchandise 10-104-4	120	144	117	146	135	128	154	136	146	125	130	123	126
11	Supervisors Management 10-196-1	-	-	-	-	20	27	29	47	76	79	76	79	103
12	Data Entry Operations 31-107-4	-	-	58	93	75	28	30	83	102	97	44	78	102
		1,858	1,958	2,014	2,282	2,303	2,518	2,786	3,169	3,640	3,383	3,508	3,471	3,177

Table 5 (Continued)

Numbers of Graduates in Programs with More than 100 Graduates Per Year
1975-76 to 1987-88

Rank 87-88	Division/Program	75-76	76-77	77-78	78-79	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88
	INDUSTRIAL													
1	Auto Mechanics 32-404-2	169	132	150	136	117	137	138	142	165	158	159	186	195
2	Auto Body 31-404-1	195	186	201	150	175	154	195	183	221	202	206	217	178
3	Machine Tool 31-420-1	177	188	159	176	189	280	306	319	255	225	210	170	165
4	Welding 31-442-1	317	269	329	303	290	389	383	379	290	216	195	185	147
5	Truck Driving 31-458-1	79	115	90	149	144	111	121	97	93	105	111	109	142
6	Machine Tool Technics 32-420-5	35	52	44	35	47	78	84	83	98	86	87	122	109
7	Auto Servicing 31-404-3	199	156	134	225	138	161	175	175	158	151	140	128	86
8	Wood Technics 31-410-2	100	98	118	136	119	156	137	128	112	72	88	82	86
9	Drafting-Mechanical 31-421-1	117	98	127	143	142	162	173	162	132	80	55	69	41
		1,388	1,294	1,352	1,453	1,361	1,628	1,712	1,668	1,524	1,295	1,251	1,268	1,149
	HEALTH													
1	Nursing Assistant 30-510-1	863	1,244	946	1,013	1,158	1,523	1,706	1,504	1,421	1,259	1,101	1,349	1,158
2	Nursing 10-510-1	287	391	392	430	500	526	619	721	866	771	750	688	674
3	Medical Assistant 31-509-1	225	222	224	249	197	214	199	227	206	171	174	177	187
4	Dental Assistant 31-508-1	131	156	156	194	172	139	180	196	178	154	156	161	146

Table 5 (Continued)

Numbers of Graduates in Programs with More than 100 Graduates Per Year
1975-76 to 1987-88

Rank 87-88	Division/Program	75-76	76-77	77-78	78-79	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88
	HEALTH (Continued)													
5	Ward Clerk 30-510-2	157	175	174	200	186	229	264	277	243	160	125	136	143
6	LPN 31-510-1	960	941	818	909	753	777	822	801	767	448	237	137	132
7	Surgical Technician 31-512-1	133	143	133	123	122	130	152	153	157	129	237	103	118
		2,756	3,272	2,843	3,118	3,088	3,538	3,942	3,879	3,838	3,092	2,780	2,751	2,558
	SERVICE													
1	Police Science 10-504-1	313	319	323	292	222	236	218	277	305	303	303	370	377
2	Cosmetology 31-502-1	95	139	143	152	167	181	211	203	232	207	190	173	169
3	Child Care Service 31-307-1	111	123	127	108	129	161	154	132	141	139	148	145	132
4	Basic Police Recruit School 30-504-1	-	-	-	10	60	76	70	75	129	110	89	105	130
5	Restaurant & Hotel Cookery 10-511-1	84	82	72	76	66	54	78	101	89	95	87	110	92
		603	663	665	638	644	708	731	788	896	854	817	903	900
	TECHNICAL													
1	Electronics 10-605-1	241	234	219	223	219	287	309	369	397	333	357	327	274
2	Mechanical Design 10-606-1	145	176	177	162	162	204	235	241	222	179	169	205	214
3	Electro Mechanical 10-620-1	0	0	0	0	13	25	44	51	70	122	160	192	178
4	Electronics Computer 10-605-3	16	19	14	24	23	32	60	61	96	134	123	127	107
		402	429	410	409	417	548	648	722	785	768	809	851	773

Table 5 (Continued)

Numbers of Graduates in Programs with More than 100 Graduates Per Year
1975-76 to 1987-88

Rank 87-88	Division/Program	75-76	76-77	77-78	78-79	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88
	GRAPHICS													
1	Commercial Art 10-201-1	122	120	98	124	124	114	138	137	131	127	120	107	103
		122	120	98	124	124	114	138	137	131	127	120	107	103
	TOTALS	7,157	7,769	7,427	8,128	8,079	9,241	10,153	10,541	11,102	9,943	9,604	9,680	9,014
	% of Total Graduates by Year	59%	59%	60%	62%	63%	64%	65%	65%	66%	66%	65%	65%	65%

The top ten programs in the VTAE System in respect to number of graduates in 1986-87 and 1987-88 were:

TOP TEN PROGRAMS IN RANK ORDER BY NUMBER OF GRADUATES
1986-87 AND 1987-88

1986-87 Rank	Graduates	No. of Graduates	1987-88 Rank	Graduates	No. of Graduates
1	30-510-1 Nursing Assistant	1,349	1	30-510-1 Nursing Assistant	1,158
2	10-101-1 Accounting	899	2	10-101-1 Accounting	820
3	10-510-1 Nursing	688	3	10-510-1 Nursing	674
4	10-104-3 Marketing	486	4	10-104-3 Marketing	427
5	10-107-1 Data Processing	437	5	10-504-1 Police Science	377
6	10-504-1 Police Science	370	6	10-107-1 Data Processing	354
7	10-106-2 Secretarial Science	361	7	30-090-1 Farm Training	354
8	31-106-1 Clerk Typist	332	8	10-605-1 Electronics	274
9	30-090-1 Farm Training	329	9	31-101-1 Account Clerk	252
10	10-605-1 Electronics	327	10	10-106-2 Secretarial Science	248
	TOTAL	5,578			4,938
		36% of Total Graduates			34% of Total Graduates
		15,471			14,680

Table 6 shows total 1986-87 and 1987-88 graduates and includes JTPA, Apprentice, and College Parallel. These graduates have not been shown in the past in state graduation totals. The 880 graduates in 1986-87 of these programs represent 5.7% of total graduates and 723 or 4.9% of graduates in 1987-88 and should be included in state reports of graduates.

Almost one-half (6,384) of all VTAE graduates in 1987-88 are from associate degree programs.

TABLE 6

GRADUATES AND NUMBER OF PROGRAMS WITH GRADUATES
1986-87 and 1987-88

Program	1986-87 No. of Programs	1986-87 % of Total	1987-88 No. of Programs	1987-88 % of Total	1986-87 No. of Graduates	1986-87 % of Total	1987-88 No. of Graduates	1987-88 % of Total
Associate Degree	133	46.8%	137	47.4%	7,200	49.3%	6,834	49.5%
Short-Term Certificate	33	11.6%	34	11.8%	2,421	16.6%	2,328	16.9%
One-Year Diploma	99	34.9%	99	34.3%	4,244	29.1%	3,930	28.5%
Two-Year Diploma	19	6.7%	19	6.6%	726	5.0%	712	5.2%
	284	100.0%	289	100.0%	14,591	100.0%	13,804	100.0%
		% of Grand Total		% of Grand Total		% of Grand Total		% of Grand Total
JTPA	10	2.9%	2	0.6%	276 *	1.8%	72	0.5%
Apprentice	48	14.0%	44	13.1%	453 *	2.9%	500	3.4%
Associate in Arts (College Parallel)	1	0.3%	1	0.3%	151	1.0%	151	1.0%
	59	17.2%	47	14.0%	880	5.7%	723	4.9%
GRAND TOTAL	343		336		15,471		14,527 **	

*220 (48.5%) of 453 apprentice graduates are from Milwaukee; 169 (69%) of 276 JTPA graduates are from Milwaukee.

**Unduplicated count - There were 14,680 graduates of all programs with 153 graduating from more than one.

MATC-Milwaukee Adult High School graduated 150 in 1986-87 and 157 in 1987-88 which are not included in the totals above.

Top ten Apprentice trade areas in terms of number of graduates in 1986-87 and 1987-88 are:

Rank 1986-87	Area	No. of Graduates 1986-87	Rank 1987-88	Area	No. of Graduates 1987-88
1	Electrical (Construction)	64 (4 programs)	1	Electrical	106 (4 programs)
2	Barbering	56 (2 programs)	2	Carpentry	55 (2 programs)
3	Sheet Metal (Construction)	51 (2 programs)	3	Barbering	41 (2 programs)
4	Steamfitting	49 (5 programs)	4	Millwright	38
5	Machine Trades	47 (5 programs)	5	Sheet Metal	35 (2 programs)
6	Tool Maker	46	6	Tool Maker	35
7	Millwright	34 (2 programs)	7	Machine Trades	34 (3 programs)
8	Carpentry	25 (2 programs)	8	Pipefitting	26
9	Painting & Decorating	11	9	Plumbing	16 (2 programs)
10	Cosmetology	11 (2 programs)	10	Environmental Ser	16
	TOTAL	394 (87% of 453 Apprentice Graduates in 1986-87)			402 (80% of 500 Apprentice Graduates in 1987-88)

WISCONSIN BOARD OF VOCATIONAL, TECHNICAL, AND ADULT EDUCATION
PROGRAM SYSTEM (VE7014OA)
GRADUATE TOTALS BY PROGRAM NUMBER

21:01 TUESDAY, DECEMBER 27, 1988

FISCAL YEAR=1987-88

No.	PROGRAM NO.	PROGRAM TITLE	GRADS STATEWIDE	01	02	03	04	05	06	08	09	10	11	12	13	14	15	16	17	No. of Districts Offering Programs
1.	30-510-1	NURSING ASSISTANT	1,158	83	54	83	27	1	113	36	128	27	131	55	75	86	84	6	169	16
2.	10-101-1	ACCOUNTING	820	68	68	31	122	28	49	35	73	53	41	88	59	22	46	7	30	16
3.	10-510-1	NURSING-TECHNICAL	674	26	37	23	77	36	59	55	104	27	21	64	44	0	67	0	34	15
4.	10-104-3	MARKETING	427	33	26	15	58	18	18	23	29	17	33	46	32	9	48	3	19	16
5.	10-804-1	POLICE SCIENCE	377	45	36	0	52	18	22	29	67	7	6	41	36	0	18	0	0	12
6.	10-107-1	DATA PROCESSING	354	46	10	9	69	14	23	15	61	0	5	22	27	11	30	0	12	14
7.	30-080-1	FARM TRAINING	354	73	0	41	55	0	1	0	0	31	0	19	26	14	46	0	48	10
8.	10-605-1	ELECTRONICS	274	32	8	0	39	10	16	45	39	0	7	20	10	7	22	0	19	13
9.	31-101-1	ACCOUNT CLERK	252	49	0	0	35	9	36	9	0	22	0	9	35	26	14	8	0	11
10.	10-106-2	ADMIN. ASST. - SECRETARIAL	248	11	0	5	31	3	22	22	25	24	5	10	16	13	16	4	41	15
11.	31-106-1	CLERK TYPIST	232	12	16	11	43	9	21	3	9	15	0	14	19	45	9	5	1	15
12.	10-606-1	MECHANICAL DESIGN TECHNICIAN	214	12	12	12	13	4	10	30	18	21	12	17	14	12	13	3	11	16
13.	10-106-7	ADMIN ASST - INFO PROCESSING	211	51	28	0	28	0	27	0	29	0	10	36	0	0	0	2	0	8
14.	32-404-2	AUTOMOTIVE MECHANICS	195	28	0	16	39	6	0	0	0	17	0	0	33	12	10	4	30	10
15.	31-509-1	MEDICAL ASSISTANT	187	0	15	0	23	16	30	18	13	0	19	0	16	15	0	0	22	10
16.	31-404-1	AUTO BODY	182	21	8	11	7	6	12	12	18	7	8	14	25	10	10	0	13	15
17.	10-620-1	ELECTRO-MECHANICAL TECHNOLOGY	178	33	5	20	0	8	18	0	7	14	10	20	13	0	30	0	0	11
18.	31-502-1	COSMETOLOGY	169	0	0	13	0	0	27	0	30	32	0	0	0	31	0	8	28	7
19.	31-420-1	MACHINE TOOL OPERATION	165	30	4	8	0	7	10	24	11	17	13	0	21	0	10	0	10	12
20.	31-103-5	WORD PROCESSOR SPECIALIST	160	0	0	8	0	10	8	0	15	0	6	0	29	33	0	0	51	8
21.	20-800-1	COLLEGE PARALLEL	151	0	0	0	40	0	0	0	94	0	0	0	0	0	0	17	0	3
22.	31-442-1	WELDING	147	8	21	6	13	11	0	4	19	0	1	0	23	12	9	0	20	12
23.	31-506-1	DENTAL ASSISTANT	146	0	31	0	13	16	17	0	12	0	12	28	17	0	0	0	0	8
24.	30-510-2	HEALTH UNIT CLERK	143	0	27	7	0	13	14	27	29	0	1	6	19	0	0	0	0	9
25.	30-458-1	TRUCK DRIVING	142	34	0	0	0	0	0	0	0	0	0	108	0	0	0	0	0	2

NOTE: ◯ indicates the highest number of graduates statewide by program.

WISCONSIN BOARD OF VOCATIONAL, TECHNICAL, AND ADULT EDUCATION
PROGRAM SYSTEM (VE7O140A)
GRADUATE TOTALS BY PROGRAM NUMBER

21:01 TUESDAY, DECEMBER 27, 1988

FISCAL YEAR=1987-88

No.	PROGRAM NO.	PROGRAM TITLE	GRADS STATEWIDE	01	02	B 03	Y 04	05	D 06	I 08	S 09	T 10	R 11	I 12	C 13	T 14	15	16	17	No. of Districts Offering Programs
26.	10-102-3	BUSINESS MID-MANAGEMENT	136	0	0	0	32	0	0	0	94	0	0	0	0	0	0	10	0	3
27.	31-307-1	CHILD CARE SERVICES	132	36	0	0	9	20	0	22	5	11	15	0	0	8	0	0	6	9
28.	31-510-1	PRACTICAL NURSING	132	0	0	3	39	0	0	0	38	43	0	0	9	0	0	0	0	5
29.	30-504-1	BASIC POLICE RECRUIT SCHOOL	130	67	0	0	18	0	0	0	0	17	0	0	0	0	28	0	0	4
30.	10-104-4	MARKETING-FASHION MERCHANDISING	126	15	11	9	14	3	13	11	10	8	0	14	7	0	0	0	11	12
31.	31-512-1	SURGICAL TECHNICIAN	118	0	12	0	13	0	17	11	23	12	0	0	11	9	10	0	0	9
32.	32-420-5	MACHINE TOOLING TECHNICS	109	0	20	0	22	0	0	0	0	22	0	0	8	0	21	2	14	7
33.	10-606-3	ELECTRONICS-COMPUTER	107	0	0	0	0	0	33	0	22	15	0	0	0	21	0	0	16	5
34.	10-196-1	SUPERVISORS MANAGEMENT	103	8	9	0	9	0	0	7	8	14	4	3	23	2	4	0	12	12
35.	10-201-1	COMMERCIAL ART	103	0	26	0	46	0	0	0	31	0	0	0	0	0	0	0	0	3
36.	31-107-4	DATA ENTRY OPERATIONS	102	32	0	25	13	0	0	0	0	0	0	0	32	0	0	0	0	4
37.	10-511-1	RESTAURANT AND HOTEL COOKERY	92	8	0	0	25	0	0	0	33	9	0	17	0	0	0	0	0	5
38.	31-404-3	AUTOMOTIVE SERVICING	86	0	0	0	4	5	9	16	37	0	7	0	8	0	0	0	0	7
39.	31-410-2	WOOD TECHNICS	86	15	21	0	13	0	0	0	0	0	0	14	23	0	0	0	0	5
40.	31-414-1	ELECTRONIC SERVICING	86	0	26	17	19	0	11	0	0	0	0	0	0	0	0	0	13	5
41.	10-508-1	DENTAL HYGIENIST	78	0	0	0	23	0	0	0	18	0	0	0	16	0	21	0	0	4
42.	31-103-1	OFFICE ASSISTANT	77	0	0	0	0	0	0	0	0	0	26	0	0	0	0	0	51	2
43.	10-109-2	HOSPITALITY MANAGEMENT	76	8	0	0	23	0	0	26	0	0	0	0	0	0	0	9	10	5
44.	10-520-3	HUMAN SERVICES ASSOCIATE	76	0	0	0	17	0	14	0	45	0	0	0	0	0	0	0	0	3
45.	31-107-3	OFFICE COMPUTER SPECIALIST	72	0	72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
46.	10-514-1	OCCUPATIONAL THERAPY TECHNICIAN	71	0	0	0	22	0	0	0	20	0	0	29	0	0	0	0	0	3
47.	10-106-4	MEDICAL SECRETARY	70	0	20	0	10	0	0	0	10	11	7	0	0	0	12	0	0	6
48.	32-412-1	DIESEL AND HEAVY EQUIP MECHANICS	70	11	26	0	20	0	0	0	0	0	0	0	0	13	0	0	0	4
49.	31-101-2	MICROCOMPUTER ACCOUNTING ASST.	70	0	0	19	0	0	0	0	0	0	0	14	0	0	0	0	37	3
50.	10-110-1	LEGAL ASSISTANT	67	19	0	0	0	0	0	0	30	0	15	0	3	0	0	0	0	4

WISCONSIN BOARD OF VOCATIONAL, TECHNICAL, AND ADULT EDUCATION
PROGRAM SYSTEM (VE70140A)
GRADUATE TOTALS BY PROGRAM NUMBER

21:01 TUESDAY, DECEMBER 27, 1988

FISCAL YEAR=1987-88

No.	PROGRAM NO.	PROGRAM TITLE	GRADS STATEWIDE	01	02	03 B	04 Y	05	06 D	08 I	09 S	10 T	11 R	12 I	13 C	14 T	15	16	17	No. of Districts Offering Programs
51.	10-304-1	INTERIOR DESIGN	65	0	9	0	13	0	7	0	18	0	0	18	0	0	0	0	0	5
52.	10-102-2	FINANCE	62	0	19	12	22	0	0	0	0	0	1	0	0	0	0	0	8	5
53.	31-413-2	ELECTRICAL POWER DISTRIBUTION	60	30	0	0	0	0	0	0	0	14	0	0	16	0	0	0	0	3
54.	10-824-1	PHYSICAL THERAPIST ASSISTANT	57	0	0	0	0	0	0	0	25	0	0	0	32	0	0	0	0	2
55.	32-414-1	ELECTRONIC SERVCING	57	7	0	0	0	0	0	18	13	0	13	0	0	0	0	0	6	5
56.	31-303-3	FOOD PREPARATION ASSISTANT	57	5	0	7	7	1	0	15	14	0	0	0	0	0	0	8	0	7
57.	32-420-1	MACHINE TOOL OPERATION	56	0	0	0	0	0	0	16	0	0	0	12	0	13	0	0	15	4
58.	31-204-1	PRINTING	56	0	10	0	8	0	0	0	12	0	17	9	0	0	0	0	0	5
59.	50-410-1	CARPENTRY (CONSTRUCTION)	55	8	0	0	0	0	3	0	29	0	1	4	0	8	2	0	0	7
60.	31-461-1	SMALL ENGINE AND CHASSIS MECH	54	12	2	0	5	3	0	2	13	0	3	0	0	0	0	4	10	9
61.	10-601-1	AIR CONDITIONING	51	14	17	0	0	0	0	0	20	0	0	0	0	0	0	0	0	3
62.	31-106-2	CLERK TYPIST-MEDICAL	51	39	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	2
63.	10-526-1	RADIOGRAPHY	50	7	15	0	9	0	0	0	13	0	0	0	0	0	6	0	0	5
64.	10-106-3	LEGAL SECRETARY	47	0	6	6	0	8	0	0	16	3	0	0	0	0	8	0	0	6
65.	31-404-8	PARTS SPECIALIST	47	0	0	0	5	0	0	0	0	0	0	13	14	0	15	0	0	4
66.	31-412-1	DIESEL EQUIPMENT MECHANIC	47	0	0	0	0	0	0	0	0	0	0	26	21	0	0	0	0	2
67.	31-501-1	BARBERING	47	10	0	0	5	0	0	0	22	0	0	0	10	0	0	0	0	4
68.	39-105-1	DATA ENTRY OPERATOR	46	0	0	0	0	0	0	0	46	0	0	0	0	0	0	0	0	1
69.	31-106-8	INFO. PROCESSING SPECIALIST	45	0	0	0	0	0	0	0	0	0	0	0	0	0	45	0	0	1
70.	31-401-1	REFRIGERATION SERVICING	44	19	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
71.	31-413-1	ELECTRICITY	43	0	0	0	0	0	0	0	13	0	0	0	30	0	0	0	0	2
72.	10-307-1	CHILD CARE AND DEVELOPMENT	41	0	7	7	0	0	0	0	15	0	0	12	0	0	0	0	0	4
73.	31-421-1	DRAFTING-MECHANICAL	41	13	6	0	0	0	13	2	0	0	0	2	0	0	5	0	0	6
74.	31-470-1	PREC INSP & NONDESTRUCT EXAM	41	33	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	2
75.	10-102-6	BANKING & FINANCIAL SERVICES	40	0	0	0	0	0	0	0	31	0	0	9	0	0	0	0	0	2

FISCAL YEAR=1987-88

No.	PROGRAM NO.	PROGRAM TITLE	GRADS STATEWIDE	01	02	03	04	05	06	08	09	10	11	12	13	14	15	16	17	No. of Districts Offering Programs
76.	10-104-7	MARKETING-RETAILING	38	0	(27)	0	0	0	0	6	5	0	0	0	0	0	0	0	0	3
77.	10-513-1	MEDICAL LABORATORY TECHNICIAN	38	(19)	0	0	11	0	0	0	8	0	0	0	0	0	0	0	0	3
78.	10-530-1	MEDICAL RECORD TECHNICIAN	38	(16)	10	0	0	0	0	0	0	12	0	0	0	0	0	0	0	3
79.	50-423-1	MILLWRIGHT	38	0	0	0	0	0	0	5	0	0	0	(14)	0	5	(14)	0	0	4
80.	10-607-5	CIVIL ENG. TECH. - STRUCTURAL	37	(16)	0	0	0	0	7	0	3	11	0	0	0	0	0	0	0	4
81.	10-614-1	ARCHITECTURAL	37	0	0	0	16	0	0	0	2	0	0	0	(19)	0	0	0	0	3
82.	32-402-1	AIRFRAME & POWERPLANT MECHANICS	37	0	0	0	0	18	(19)	0	0	0	0	0	0	0	0	0	0	2
83.	30-542-1	HOMEMAKER/HOME HEALTH AIDE	37	0	(28)	0	0	0	9	0	0	0	0	0	0	0	0	0	0	2
84.	10-091-1	ANIMAL TECHNOLOGY	36	0	0	0	(36)	0	0	0	0	0	0	0	0	0	0	0	0	1
85.	10-194-2	MARKETING-MATERIALS MANAGEMENT	36	9	0	0	0	0	9	0	2	0	(16)	0	0	0	0	0	0	4
86.	50-501-1	BARBERING	36	2	0	0	0	0	4	3	(23)	0	0	4	0	0	0	0	0	5
87.	10-504-2	CORRECTIONS SCIENCE	35	0	0	0	0	0	0	0	0	15	0	0	(20)	0	0	0	0	2
88.	10-515-1	RESPIRATORY THERAPIST	35	0	0	0	12	0	0	0	(14)	0	0	0	9	0	0	0	0	3
89.	30-109-2	TRAVEL AGENT	35	0	0	0	0	0	(35)	0	0	0	0	0	0	0	0	0	0	1
90.	50-413-3	ELECTRICAL CONSTRUCTION (TECH)	35	0	0	0	0	0	0	0	(35)	0	0	0	0	0	0	0	0	1
91.	50-439-3	TOOL & DIE	35	0	0	0	0	0	10	11	(12)	0	1	1	0	0	0	0	0	5
92.	32-070-1	AGRICULTURE MECHANICS	34	6	0	9	0	0	0	0	0	1	0	0	0	0	8	0	(10)	5
93.	30-442-2	WELDING/MAINT. & FABRICATION	34	0	0	0	0	0	(34)	0	0	0	0	0	0	0	0	0	0	1
94.	10-102-7	BUSINESS ADMINISTRATION PERSONEL	33	0	13	0	0	4	0	0	0	0	0	0	0	(16)	0	0	0	3
95.	10-203-1	PHOTOGRAPHY	33	0	0	0	12	0	0	0	(21)	0	0	0	0	0	0	0	0	2
96.	10-607-8	PUBLIC WORKS TECHNICIAN	33	0	0	0	(12)	0	0	0	9	0	0	0	(12)	0	0	0	0	3
97.	10-623-1	INDUSTRIAL ENGINEERING TECHNIC	33	0	1	0	0	1	1	1	10	(11)	1	4	0	0	3	0	0	9
98.	31-404-2	AUTOMOTIVE SERVICING MECHANIC	33	0	(18)	0	0	0	0	0	0	0	0	15	0	0	0	0	0	2
99.	10-518-1	FOOD SERVICE MANAGEMENT	32	0	(10)	8	0	0	7	0	0	0	0	7	0	0	0	0	0	4
100.	10-106-1	COURT AND CONFERENCE REPORTING	30	0	0	0	4	0	(14)	0	0	0	5	0	0	0	0	0	7	4
Number of Programs by District with highest graduate totals (Top 100)				16	11	0	9	0	7	6	24	4	2	4	10	2	3	0	6	

TOP TEN PROGRAMS STATEWIDE AND BY DISTRICT BY NUMBER OF GRADUATES IN 1987-88

Rank		Name of Program	No. of Graduates	Cumulative % of Total Graduates	Total* FTE	Cumulative % of Total FTE
STATEWIDE						
1	30-510-1	Nursing Assistant	1,158	7.9%	244	0.4%
2	10-101-1	Accounting	820	13.5%	2,796	5.4%
3	10-510-1	Nursing	674	18.1%	1,693	8.4%
4	10-104-3	Marketing	427	21.0%	1,661	11.3%
5	10-504-1	Police Science	377	23.5%	1,357	13.7%
6	10-107-1	Data Processing	354	26.0%	1,376	16.1%
7	30-090-1	Farm Training	354	28.4%	222	16.5%
8	10-605-1	Electronics	274	30.2%	968	18.2%
9	31-101-1	Account Clerk	252	31.9%	348	18.8%
10	10-106-2	Adm Asst-Secretarial	248	33.6%	1,010	20.6%
		TOTAL	4,938	14,680 Total State Graduates	11,675 *	56,648 Total Program State FTE*

Top 10 include:
2 Short Term (30)
1 1-Year Diploma (31)
7 Associate Degree (10)
New programs in state since 1980 = 0

*NOTE: FTE by program includes all courses that are part of the program, both occupational and general education. Program FTEs are used in all district tables that follow.

There are 336 programs in the state that have at least one graduate. Ten (3%) of programs in state VTAE produce 33.6% of graduates and 20.6% of FTEs.

District 1 - Chippewa Valley
Top 10 Programs - 1987-88

Rank	Name of Program	No. of Graduates	Cumulative % of Total Graduates	Total FTE	Cumulative % of Total FTE
1	30-510-1 Nursing Assistant	83	6.4%	16	0.5%
2	30-090-1 Farm Training	73	12.0%	32	1.4%
3	10-101-1 Accounting	68	17.2%	187	6.9%
4	30-504-1 Basic Police Recruit	67	22.3%	29	7.8%
5	10-106-7 Adm Asst-Info Process	51	26.2%	131	11.6%
6	31-101-1 Account Clerk	49	30.0%	47	13.0%
7	31-106-2 Clerk Typist - Medical	39	33.0%	67	15.0%
8	31-307-1 Child Care Services	36	35.7%	40	16.2%
9	30-458-1 Truck Driving	34	38.3%	30	17.1%
10	10-620-1 Electro-Mech Tech	33	40.9%	90	19.7%
	TOTAL	533	1,304 Chippewa V Graduates	669	3,395 Chippewa V FTEs

Top 10 include:
4 Short Term (30)
3 1-Year Diploma (31)
3 Associate Degree (10)
New programs in state since 1980 = 0
Chippewa Valley has 53 State Code 10, 30, 31, or 32 programs with graduates.

District 2 - Western
Top 10 Programs - 1987-88

1	31-107-3 Office Computer Spec*	72	7.6%	130	4.1%
2	10-101-1 Accounting	68	14.7%	175	9.7%
3	30-510-1 Nursing Assistant	54	20.4%	15	10.1%
4	10-510-1 Nursing	37	24.2%	193	16.3%
5	10-504-1 Police Science	36	28.0%	111	19.8%
6	31-508-1 Dental Assistant	31	31.3%	22	20.5%
7	10-106-7 Adm Asst-Info Process	28	34.2%	81	23.0%
8	30-542-1 Homemaker/Health Aide	28	37.1%	14	23.5%
9	10-104-7 Marketing-Retailing	27	40.0%	52	25.1%
10	30-510-2 Health Unit Clerk	27	42.8%	10	25.5%
		408	953 Western Graduates	803	3,155 Western FTEs

Top ten include:
3 Short Term (30)
2 1-Year Diploma (31)
5 Associate Degree (10)
*New programs in state since 1980 = 1 (1982)
Western has 55 State Code 10, 30, 31, or 32 programs with graduates.

District 3 - Southwest
Top 10 Programs - 1987-88

Rank	Name of Program	No. of Graduates	Cumulative % of Total Graduates	Total FTE	Cumulative % of Total FTE
1	30-510-1 Nursing Assistant	83	16.4%	18	1.5%
2	30-090-1 Farm Training	41	24.5%	30	4.0%
3	10-101-1 Accounting	31	30.6%	74	10.1%
4	31-107-4 Data Entry Operator	25	35.5%	35	13.0%
5	10-510-1 Nursing	23	40.0%	64	18.3%
6	10-620-1 Electro-Mech Tech	20	44.0%	49	22.4%
7	31-101-2 Microcomp Acct Asst*	19	47.7%	29	24.8%
8	31-414-1 Electronic Servicing	17	51.1%	19	26.4%
9	32-404-2 Auto Mechanics	16	54.2%	57	31.1%
10	10-104-3 Marketing	15	57.2%	51	35.3%
	TOTAL	290	507 Southwest Graduates	426	1,206 Southwest FTEs

Top 10 include:
2 Short Term (30)
3 1-Year Diploma (31)
1 2-Year Diploma (32)
4 Associate Degree (10)
*New programs in state since 1980 = 1 (1985)
Southwest has 38 State Code 10, 30, 31, or 32 programs with graduates.

District 4 - Madison
Top 10 Programs - 1987-88

1	10-101-1 Accounting	122	7.7%	483	6.7%
2	10-510-1 Nursing	77	12.5%	136	8.5%
3	10-107-1 Data Processing	69	16.8%	311	12.8%
4	10-104-3 Marketing	58	20.5%	256	16.4%
5	30-090-1 Farm Training	55	23.9%	29	16.8%
6	10-504-1 Police Science	52	27.2%	204	19.6%
7	10-201-1 Commercial Art	46	30.1%	194	22.3%
8	31-106-1 Clerk Typist	43	32.8%	106	23.7%
9	20-800-1 College Parallel	40	35.3%	1,294	41.6%
10	10-605-1 Electronics	39	37.8%	160	43.8%
	32-404-2 Auto Mechanics	39	40.2%	87	45.0%
	31-510-1 Practical Nursing	39	42.7%	57	45.8%
		679	1,592 Madison Graduates	3,317	7,246 Madison FTEs

Top ten include:
1 Short Term (30)
2 1-Year Diploma (31)
1 2-Year Diploma (32)
8 Associate Degree (10-20)
New programs in state since 1980 = 0
Madison has 79 State Code 10, 20, 30, 31, or 32 programs with graduates.

District 5 - Blackhawk
Top 10 Programs - 1987-88

Rank	Name of Program	No. of Graduates	Cumulative % of Total Graduates	Total FTE	Cumulative % of Total FTE
1	10-510-1 Nursing	36	9.9%	139	8.6%
2	10-101-1 Accounting	28	17.6%	97	14.6%
3	31-307-1 Child Care Services	20	23.1%	31	16.5%
4	10-104-3 Marketing	18	28.1%	80	21.4%
5	10-504-1 Police Science	18	33.1%	81	26.4%
6	31-509-1 Medical Assistant	16	37.5%	26	28.0%
7	31-508-1 Dental Assistant	16	41.9%	22	29.4%
8	10-107-1 Data Processing	14	45.7%	61	33.1%
9	30-510-2 Health Unit Clerk	13	49.3%	13	34.0%
10	31-106-2 Clerk Typist - Medical	12	52.6%	20	35.2%
	TOTAL	191	363 Blackhawk Graduates	570	1,620 Blackhawk FTEs

Top 10 include:
1 Short Term (30)
4 1-Year Diploma (31)
5 Associate Degree (10)
New programs in state since 1980 = 0
Blackhawk has 37 State Code 10, 30, 31, or 32 programs with graduates.

District 6 - Gateway
Top 10 Programs - 1987-88

1	30-510-1 Nursing Assistant	113	11.3%	27	0.7%
2	10-510-1 Nursing	59	17.2%	183	5.2%
3	10-101-1 Accounting	49	22.1%	188	9.9%
4	31-101-1 Account Clerk	36	25.7%	51	11.1%
5	30-109-2 Travel Agent	35	29.2%	32	11.9%
6	30-442-2 Welding/Maint & Fab*	34	32.6%	37	12.8%
7	10-605-3 Electronics - Computer	33	35.9%	79	14.8%
8	31-509-1 Medical Assistant	30	38.9%	42	15.8%
9	10-106-7 Adm Asst-Info Process	27	41.6%	108	18.5%
10	31-502-1 Cosmetology	27	44.3%	50	19.8%
		443	1,000 Gateway Graduates	797	4,035 Gateway FTEs

Top ten include:
3 Short Term (30)
3 1-Year Diploma (31)
4 Associate Degree (10)
*New programs in state since 1980 = 1 (1982)
Gateway has 58 State Code 10, 30, 31, or 32 programs with graduates.

District 8 - Waukesha
Top 10 Programs - 1987-88

Rank	Name of Program	No. of Graduates	Cumulative % of Total Graduates	Total FTE	Cumulative % of Total FTE
1	10-510-1 Nursing	55	7.5%	127	4.0%
2	10-605-1 Electronics	45	13.6%	151	8.7%
3	30-510-1 Nursing Assistant	36	18.6%	5	8.8%
4	10-101-1 Accounting	35	23.3%	165	14.0%
5	10-606-1 Mech Design Tech	30	27.4%	79	16.4%
6	10-504-1 Police Science	29	31.4%	122	20.3%
7	30-510-2 Health Unit Clerk	27	35.1%	17	20.8%
8	10-109-2 Hospitality Management	26	38.6%	93	23.7%
9	31-420-1 Machine Tool	24	41.9%	23	24.4%
10	10-104-3 Marketing	23	45.0%	123	28.2%
	TOTAL	330	733 Waukesha Graduates	905	3,204 Waukesha FTEs

Top 10 include:
2 Short Term (30)
1 1-Year Diploma (31)
7 Associate Degree (10)
New programs in state since 1980 = 0
Waukesha has 47 State Code 10, 30, 31, or 32 programs with graduates.

District 9 - Milwaukee
Top 10 Programs - 1987-88

1	30-510-1 Nursing Assistant	128	5.4%	7	0.1%
2	10-510-1 Nursing	104	9.8%	190	1.6%
3	20-800-1 College Parallel	94	13.8%	1,064	10.0%
4	10-102-3 Business Mid-Management	94	17.8%	255	12.1%
5	10-101-1 Accounting	73	20.9%	294	14.4%
6	10-504-1 Police Science	67	23.7%	231	16.3%
7	10-107-1 Data Processing	61	26.3%	231	18.1%
8	39-105-1 Data Entry	46	28.3%	29	18.3%
9	10-520-3 Human Services Asst	45	30.2%	231	20.2%
10	10-605-1 Electronics	39	31.8%	104	21.0%
		751	2,359 Milwaukee Graduates	2,636	12,551 Milwaukee FTEs

Top ten include:
1 Short Term (30)
1 JTPA Short-Term (39)
8 Associate Degree (10-20)
New programs in state since 1980 = 0
Milwaukee has 102 State Code 10, 30, 31, 32, or 39 programs with graduates.

District 10 - Moraine Park
Top 10 Programs - 1987-88

Rank	Name of Program	No. of Graduates	Cumulative % of Total Graduates	Total FTE	Cumulative % of Total FTE
1	10-101-1 Accounting	53	7.6%	154	6.4%
2	31-510-1 Practical Nursing	43	13.8%	31	7.7%
3	31-502-1 Cosmetology	32	18.4%	44	9.5%
4	30-090-1 Farm Training	31	22.9%	6	9.8%
5	10-510-1 Nursing	27	26.8%	81	13.1%
6	30-510-1 Nursing Assistant	27	30.6%	6	13.4%
7	10-106-2 Adm Asst-Secretarial	24	34.1%	70	16.3%
8	32-420-5 Machine Tooling Tech	22	37.3%	68	19.1%
9	31-101-1 Account Clerk	22	40.4%	25	20.2%
10	10-606-1 Mech Design Tech	21	43.5%	72	23.2%
	TOTAL	302	695 Moraine Pk Graduates	557	2,406 Moraine Pk FTEs

Top 10 include:
2 Short Term (30)
3 1-Year Diploma (31)
1 2-Year Diploma (32)
4 Associate Degree (10)
New programs in state since 1980 = 0
Moraine Park has 51 State Code 10, 30, 31, or 32 programs with graduates.

District 11 - Lakeshore
Top 10 Programs - 1987-88

1	30-510-1 Nursing Assistant	131	23.6%	34	1.7%
2	10-101-1 Accounting	41	31.0%	116	7.5%
3	10-104-3 Marketing	33	37.0%	103	12.6%
4	31-103-1 Office Assistant	26	41.7%	39	14.6%
5	10-510-1 Nursing	21	45.5%	36	16.4%
6	31-509-1 Medical Assistant	19	48.9%	24	17.6%
7	31-204-1 Printing	17	52.0%	21	18.6%
8	10-194-2 Mktg-Mat Management	16	54.9%	44	20.8%
9	31-307-1 Child Care Services	15	57.6%	31	22.4%
10	10-110-1 Legal Assistant	15	60.3%	59	25.3%
	31-536-1 Pharmacy Tech Aide	15	63.0%	17	26.1%
	10-516-1 Dispensing Optician	15	65.7%	18	27.0%
		364	554 Lakeshore Graduates	542	2,004 Lakeshore FTEs

Top ten include:
1 Short Term (30)
5 1-Year Diploma (31)
6 Associate Degree (10)
New programs in state since 1980 = 0
Lakeshore has 40 State Code 10, 30, 31, or 32 programs with graduates.

District 12 - Fox Valley
Top 10 Programs - 1987-88

Rank	Name of Program	No. of Graduates	Cumulative % of Total Graduates	Total FTE	Cumulative % of Total FTE
1	30-458-1 Truck Driving	108	10.0%	50	1.2%
2	10-101-1 Accounting	88	18.2%	243	6.9%
3	10-510-1 Nursing	64	24.1%	130	9.9%
4	30-510-1 Nursing Assistant	55	29.2%	11	10.2%
5	10-104-3 Marketing	46	33.5%	176	14.3%
6	10-504-1 Police Science	36	36.8%	122	17.2%
7	10-106-7 Adm Asst-Info Process	36	40.2%	127	20.2%
8	10-514-1 Occup Therapy Tech	29	42.9%	84	22.1%
9	31-508-1 Dental Assistant	28	45.5%	32	22.9%
10	31-412-1 Diesel Equip Mech	26	47.9%	44	23.9%
	31-107-6 Computer Operator	26	50.3%	42	24.9%
	TOTAL	542	1,078 Fox Valley Graduates	1,061	4,258 Fox Valley FTEs

Top 10 include:
2 Short Term (30)
3 1-Year Diploma (31)
6 Associate Degree (10)
New programs in state since 1980 = 0
Fox Valley has 50 State Code 10, 30, 31, or 32 programs with graduates.

District 13 - Northeast
Top 10 Programs - 1987-88

1	30-510-1 Nursing Assistant	75	6.8%	9	0.2%
2	10-101-1 Accounting	59	12.2%	212	5.5%
3	10-510-1 Nursing	44	16.2%	96	8.0%
4	10-504-1 Police Science	36	19.5%	133	11.3%
5	31-101-1 Account Clerk	35	22.7%	55	12.7%
6	32-404-2 Auto Mechanics	33	25.7%	80	14.7%
7	31-107-4 Data Entry Operator	32	28.6%	46	15.8%
8	10-104-3 Marketing	32	31.5%	147	19.5%
9	10-524-1 Physical Therapy Asst	32	34.4%	60	21.0%
10	31-413-1 Electricity	30	37.1%	42	22.1%
		408	1,099 Northeast Graduates	880	3,986 Northeast FTEs

Top ten include:
1 Short Term (30)
3 1-Year Diploma (31)
1 2-Year Diploma (32)
5 Associate Degree (10)
New programs in state since 1980 = 0
Northeast has 62 State Code 10, 30, 31, or 32 programs with graduates.

District 14 - Mid-State
Top 10 Programs - 1987-88

Rank	Name of Program	No. of Graduates	Cumulative % of Total Graduates	Total FTE	Cumulative % of Total FTE
1	30-510-1 Nursing Assistant	86	15.4%	17	1.0%
2	31-106-1 Clerk Typist	45	23.4%	51	4.0%
3	31-103-5 Word Processing Spec	33	29.3%	52	7.0%
4	31-502-1 Cosmetology	31	34.8%	45	9.6%
5	31-101-1 Account Clerk	26	39.5%	38	11.8%
6	10-101-1 Accounting	22	43.4%	98	17.5%
7	10-605-3 Electronics-Computer	21	47.1%	60	21.0%
8	10-605-4 Instrumentation	18	50.4%	60	24.5%
9	10-102-7 Bus Adm Personnel	16	53.2%	56	27.7%
10	31-509-1 Medical Assistant	15	55.9%	33	29.7%
	TOTAL	313	560 Mid-State Graduates	510	1,719 Mid-State FTEs

Top 10 include:
1 Short Term (30)
5 1-Year Diploma (31)
4 Associate Degree (10)
New programs in state since 1980 = 0
Mid-State has 34 State Code 10, 30, 31, or 32 programs with graduates.

District 15 - North Central
Top 10 Programs - 1987-88

1	30-510-1 Nursing Assistant	84	10.8%	17	0.7%
2	10-510-1 Nursing	67	19.3%	97	4.7%
3	10-104-3 Marketing	48	25.5%	129	10.1%
4	10-101-1 Accounting	46	31.4%	124	15.3%
5	30-090-1 Farm Training	46	37.3%	22	16.2%
6	31-106-8 Info Process Spec	45	43.0%	64	18.8%
7	10-620-1 Electro-Mech Tech	30	46.9%	65	21.5%
8	10-107-1 Data Processing	30	50.7%	100	25.7%
9	30-504-1 Bas Police Recrt Sch	28	54.3%	7	26.0%
10	10-622-2 Laser Technician	28	57.9%	71	29.0%
		452	781 N Central Graduates	696	2,404 N Central FTEs

Top ten include:
3 Short Term (30)
1 1-Year Diploma (31)
6 Associate Degree (10)
New programs in state since 1980 = 0
North Central has 36 State Code 10, 30, 31, or 32 programs with graduates.

District 16 - Nicolet
Top 10 Programs - 1987-88

Rank	Name of Program	No. of Graduates	Cumulative % of Total Graduates	Total FTE	Cumulative % of Total FTE
1	20-800-1 College Parallel	17	11.9%	301	34.4%
2	30-447-1 Timber Harv Equip Op	16	23.1%	11	35.7%
3	10-102-3 Bus Mid-Management	10	30.1%	35	39.7%
4	10-109-2 Hospitality Managemnt	9	36.4%	31	43.2%
5	31-101-1 Account Clerk	8	42.0%	8	44.1%
6	31-502-1 Cosmetology	8	47.6%	24	46.9%
7	31-303-3 Food Prep Assistant	8	53.1%	19	49.0%
8	10-101-1 Accounting	7	58.0%	39	53.5%
9	32-303-1 Rest & Inst Food Prep*	7	62.9%	19	55.7%
10	30-510-1 Nursing Assistant	6	67.1%	6	56.3%
	TOTAL	96	143 Nicolet Graduates	493	875 Nicolet FTEs

Top 10 include:
2 Short Term (30)
3 1-Year Diploma (31)
1 2-Year Diploma (32)
4 Associate Degree (10)
*New programs in state since 1980 = 1 (1983)
Nicolet has 23 State Code 10, 30, 31, or 32 programs with graduates.

District 17 - Indianhead
Top 10 Programs - 1987-88

1	30-510-1 Nursing Assistant	169	17.6%	34	1.3%
2	31-103-5 Word Process Spec	51	22.9%	64	3.8%
3	31-103-1 Office Assistant	51	28.3%	78	6.9%
4	30-090-1 Farm Training	48	33.3%	27	7.9%
5	10-106-1 Adm Asst-Secretarial	41	37.5%	33	9.2%
6	31-101-2 Microcomp Acct Asst*	37	41.4%	56	11.4%
7	10-510-1 Nursing	34	44.9%	83	14.6%
8	10-101-1 Accounting	30	48.1%	147	20.4%
9	32-404-2 Auto Mechanics	30	51.2%	94	24.1%
10	31-502-1 Cosmetology	28	54.1%	35	25.4%
		519	959 Indianhead Graduates	651	2,560 Indianhead FTEs

Top ten include:
2 Short Term (30)
4 1-Year Diploma (31)
1 2-Year Diploma (32)
3 Associate Degree (10)
*New programs in state since 1980 = 1 (1985)
Indianhead has 53 State Code 10, 30, 31, or 32 programs with graduates.

Median Salaries of VTAE Graduates

The median salary of the top 50 programs in terms of graduates (range 1,158 to 74 graduates) in the state in 1987 was $12,474 annually with a range of $20,796 for Nursing-Technical to $7,476 for Cosmetology graduates. Cosmetologists receive tips so their actual earnings are higher. The next lowest salaries were for one-year diploma Child Care graduates at $8,304 (165 graduates in 1987).

MATC-Milwaukee research on MATC graduates in 1988 indicates that median salaries in service and health occupations have surpassed technical and industrial graduates in recent years. As a result, female graduates at MATC have average starting salaries that are higher than males in many cases. The highest average salary at MATC was earned by Dental Hygienists at $23,460 (78 graduates statewide in 1988).

TOP MEDIAN STARTING SALARIES FOR PROGRAMS WITH OVER 100 GRADUATES IN THE STATE - 1987

Rank	Program	Yearly Median	Graduates Statewide
1	10-510-1 Nursing - Technical	$20,796	688
2	30-504-1 Basic Police Recruit School *	$19,992	105
3	30-458-1 Truck Driving	$18,180	109
4	10-620-1 Electro-Mechanical Technology	$17,556	192
5	10-107-1 Data Processing	$17,538	437
6	32-420-5 Machine Tooling Technics	$17,484	122
7	10-605-1 Electronics	$16,992	327
8	10-606-1 Mechanical Design Technician	$16,716	205
9	10-504-1 Police Science	$16,596	370
10	31-420-1 Machine Tool Operation	$15,588	170
11	10-605-3 Electronics - Computer	$15,588	127
12	31-510-1 Practical Nursing	$14,904	137
13	31-442-1 Welding	$14,808	185
14	30-090-1 Farm Training	$14,700	351
15	31-512-1 Surgical Technician	$13,980	103
	Weighted Average	$17,678	3,628

*All employed prior to entering program.

Source: 1986-87 State VTAE Follow-Up

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IV. NEW PROGRAMS 1980-1988

Table 7 is a list of 188 new programs that have been approved by the State Board from 1980 to 1988. One hundred and seven (107) of these programs are degree or diploma programs and 81 are apprentice programs. The top ten new programs from 1980 to 1988 in number of graduates is as follows:

Rank	Program		District	Year Approved	Graduates Statewide
1	31-107-3	Office Computer Specialist	(Western)	1982	72
2	31-101-2	Microcomputer Acctg Specialist	(4 Districts)	1985	70
3	30-404-9	Parts Specialist	(4 Districts)	1980	47
4	31-106-8	Information Processing Specialist	(North Central)	1985	45
5	10-107-5	Microcomputer Application Analyst	(2 Districts)	1985	30
6	31-421-2	Mechanical and Computer Drafting	(4 Districts)	1985	27
7	31-107-6	Computer Operator	(Fox Valley)	1985	26
8	31-303-6	Retail Bakery Production	(4 Districts)	1985	24
9-10	30-307-1	Child Day Care	(Northeast)	1980	22
	10-503-2	Fire Protection Technology	(2 Districts)	1980	22
	10-605-8	Electronics - Telecommunications	(3 Districts)	1984	22

The 107 new degree and diploma programs from 1980 to 1988 produced 878 graduates or about 6% of the 13,804 degree and diploma graduates in 1987-88. New apprentice programs produced 244 graduates. Most apprentice programs were started before 1980 but did not receive state approval until after 1980.

TABLE 7

NEW PROGRAMS 1980-1988

The following are new programs the State Board approved from 1980 through 1988. Programs which were approved during these years but have been discontinued are not included.

Type	Division/Program	First Year Approved	No. of Districts	Total Enrollment 1987-88	Full-Time Enrollment 1987-88	Graduates 1987-88
	AGRICULTURE					
10-001-2	Horticulture Marketing	80	1	33	13	5
10-006-2	Agribusiness Services and Supplies	83	5	37	24	15
10-001-3	Landscape Management	85	1	39	15	3
10-007-2	Biotechnology Laboratory Tech	87	1	28	13	0
30-006-1	Operating Agribusiness for Results	80	3	1	1	0
30-001-3	Landscape and Turf Services	80	1	45	45	1
30-006-2	Operating Agribusiness Service Dept	81	1			
30-006-3	Operating Agribusiness Parts Dept	82	1			
30-006-4	Operating Agribusiness Sales Dept	83	1			
30-001-5	Basic Horticulture	84	1	28	28	15
30-006-5	Operating Agribus Financial Dept	84	1			
30-080-3	Farm Hand	85	1			
30-001-6	Agroecology	87	1	5	5	0
31-003-5	Agribus Equip Install & Service	82	1			
31-070-3	Agriculture Equipment Mechanic	83	2	45	12	6
31-080-5	Dairy Farm Operation	85	1	14	0	1
31-070-1	Diesel Power Mechanic	87	1	20	13	3
32-080-2	Farm Management	84	1	4	3	2
				299	172	51
	BUSINESS					
10-109-5	Tourism Recreation Associate	80	1	84	33	10
10-109-4	Recreation Resource Associate	80	1	46	20	11
10-107-4	Information Systems Management	83	1	56	38	11
10-111-4	International Trade Associate	84	1	66	8	4
10-111-5	Small Business Management	84	2	27	5	0
10-102-9	Municipal Administration	84	1	20	0	0
10-107-5	Microcomputer Applications Analyst	85	2	173	77	30
10-107-3	Computer Information Systems	86	1	54	24	2
10-106-5	Court Reporting Scopist	86	1	10	7	5
10-106-8	Office Systems Specialist	86	1	44	10	3
10-114-1	Financial Planning Associate	87	1	70	4	0
30-102-1	Small Business Training	87	2			
30-106-1	Automated Bus Support Specialist	86	1	26	26	11
31-111-3	Advertising Sales	80	1	25	4	9
31-107-3	Office Computer Specialist	82	1	321	74	72
31-101-2	Microcomputer Accounting Assistant	85	4	189	71	70
31-106-8	Information Processing Specialist	85	1	142	25	45
31-107-6	Computer Operator	85	1	89	14	26
				1,442	440	309

Table 7 (Continued)
New Programs 1980-1988

Type	Division/Program	First Year Approved	No. of Districts	Total Enrollment 1987-88	Full-Time Enrollment 1987-88	Graduates 1987-88
	GRAPHICS					
10-206-3	Visual Communication-Video Tech	85	1	45	20	4
31-204-6	Flexographic Printing	81	1	31	16	12
				76	36	16
	HOME ECONOMICS					
10-309-1	Environmental Services Management	83	1	34	8	2
10-307-2	Child Care Associate	86	1	16	10	2
10-303-5	Food & Hospitality Management Tech	86	1	49	26	8
30-307-1	Child Day Care	80	1	52	52	22
30-303-8	Foods/Resort Maint Service Aide	82	1	6	6	0
30-301-3	Sewing for Profit	85	1	186	186	0
30-303-1	Restaurant Cook Assistant	85	1	4	4	0
30-303-9	Dietary Manager	85	2	23	23	21
30-301-4	Industrial Sewing Operator Training	86	1	38	38	13
30-307-4	Infant/Toddler Care Services	87	1	17	17	14
31-303-6	Retail Bakery Production	85	4	51	27	24
31-307-2	Infant and Child Specialist	86	1	7	1	1
32-303-1	Restaurant & Institution Food Prep	83	1	14	5	7
				497	403	114
	SERVICE AND HEALTH					
10-503-2	Fire Protection Technician	80	2	142	72	22
10-545-1	Comm Devel Disabilities Assoc	82	2	111	21	7
10-503-3	Fire Protection Engineering Tech	83	1	31	18	11
10-526-2	Diagnostic Medical Sonography	84	1	19	10	8
10-503-4	Hazardous Material Handling Tech	86	2	31	14	0
10-550-1	Alcohol & Other Drug Abuse Assoc	87	1	21	1	0
30-503-2	Fire Service Certification	82	2	151	151	0
30-518-3	School Food Service Assistant	85	1	40	40	12
30-531-1	Emerg Medical Services Specialist	85	1	49	49	3
30-542-2	Home Health Assistant/Companion	85	1	2	2	0
30-503-3	Chief Officer	85	1	10	10	0
30-503-4	Fire Officer	85	1			
30-502-2	Skin Care Specialist	86	1	4	4	3
31-510-2	Health Unit Coordinator	84	1	37	10	9
				648	402	75

Table 7 (Continued)
New Programs 1980-1988

Type	Division/Program	First Year Approved	No. of Districts	Total Enrollment 1987-88	Full-Time Enrollment 1987-88	Graduates 1987-88
	TECHNICAL AND INDUSTRIAL					
10-443-1	Facility Systems Technician	80	2	46	27	14
10-624-1	Radiation Protection Tech	80	1	24	13	6
10-623-3	Manufacturing Engineering Tech	81	4	84	12	8
10-455-3	Construction Supervisor Management	81	1	1	0	0
10-605-7	Electronic Systems Technician	83	1	52	25	7
10-605-8	Electronics - Telecommunications	84	3	115	64	22
10-455-2	Industrial Supervision Tech	84	1	15	0	1
10-605-9	Electronic Circuit Board Design	84	1	86	24	17
10-628-1	Computerized Machinery Tech	84	1	36	19	9
10-602-3	Automotive Servicing Technician	85	2	55	35	8
10-628-2	Computer Integrated Mfg Tech	85	2	70	26	10
10-628-3	Automated Mfg Systems Tech	85	1	48	24	14
10-609-1	Electronics Design & Packaging Tech	86	1	30	11	2
10-623-6	Materials Planning and Control Tech	88	1			
10-629-1	Industrial Coatings Technician	88	1			
30-404-9	Parts Clerk	81	1			
30-443-1	Building Cleaning and Care	85	1			
30-428-1	Power Eng. and Boiler Operator	86	1	29	29	9
30-442-2	Welding/Maintenance and Fabrication	86	1	80	80	34
30-404-4	Advanced Auto Body Repair	87	1			
30-460-1	Machine and Tool Repair	87	1	44	44	11
30-462-1	Welder Equipment Maintenance repair	87	1	27	27	12
30-469-1	Petroleum Distribution Services	88	1			
31-404-9	Parts Specialist	80	4	121	41	47
31-462-4	Matl Handling Equip-Robotics Repair	80	1	33	5	3
31-462-2	Industrial Mechanic	81	2	46	17	16
31-443-3	Military - Building Services	82	1	59	0	1
31-469-1	Military - Petroleum Chemical Serv	82	1	4	0	0
31-458-1	Military Motor Transport	82	1	45	0	0
31-463-2	Industrial Plastic Machine Operator	84	1	13	8	2
31-421-2	Mechanical and Computer Drafting	85	4	96	17	27
31-412-5	Truck Mechanic	85	1	2	0	0
31-412-6	Long/Min/Diesel Equip Maint & Repr	86	1	14	5	2
31-415-1	Metal Casting	86	1			
31-442-2	Fabrication Welding	86	1	14	6	7
31-401-2	Air Cond. and Burner Service	88	1			
31-410-4	Weatherization Technics	87	2	31	0	0
31-443-4	Building Services	87	1	47	1	3
31-448-2	Drafting Marine	88	1	14	8	7
32-471-1	Horology	83	1	16	11	5
32-419-1	Fluid Power Maintenance	84	1	38	26	9
32-454-1	Packaging Systems Equipment Maint	88	1			
				1,435	605	313
	Total Degree and Diploma Programs			4,397	2,058	878

Table 7 (Continued)
New Programs 1980-1988

Type	Division/Program	First* Year Approved	No. of Districts	Total Enrollment 1987-88	Full-Time Enrollment 1987-88	Graduates 1987-88
	APPRENTICE					
50-204-1	Printing Apprentice	86	2	5	5	0
50-204-2	Printing Apprentice Correspondence	87	1			
50-202-2	Jeweler	88	1	1	1	0
50-204-3	Compositor	88	1	1	1	0
50-303-1	Baking I	86	2			
50-307-1	Child Care	88	1			
50-502-2	Cosmetology (Ind Study/Reg/Adv)	86	2	2	2	0
50-518-1	Cook-Chef Apprentice	86	2	28	28	1
50-501-2	Barber Apprenticeship (Graduate)	87	3	57	57	5
50-501-3	Barber Apprenticeship (Nongraduate)	87	1			
50-502-3	Cosmetology Advanced	88	1			
50-518-2	Meatcutter	88	1			
50-420-1	Injection Mold Setup	81	1	14	14	5
50-420-2	Machinist Apprenticeship	81	14	167	167	23
50-420-3	Inspector Apprenticeship	81	1			
50-421-1	Drafter Apprenticeship	81	2			
50-422-1	Heat Treater Apprenticeship	81	2			
50-439-1	Tool Maker Apprenticeship	81	2	41	41	0
50-439-2	Tool Design Apprenticeship	81	2	3	3	0
50-445-2	Coin Machine Repair Apprentice	81	1	13	13	0
50-462-2	Machine Erector Apprenticeship	81	1			
50-623-1	Industrial Engineer Apprentice	81	1			
50-623-3	Manufacturing Engineer Apprentice	81	1			
50-407-1	Boilermaker Apprentice	82	1			
50-472-1	Industrial Mobile Equip Mechanic	84	1	14	14	0
50-404-1	Auto Body Repair	86	4	3	3	0
50-413-6	Electrical Lineman	86	2	40	40	22
50-401-1	Environmental Service	86	1	43	43	16
50-412-1	Garage Mechanic Apprenticeship	86	1	10	10	0
50-412-2	Truck and Trailer Mechanic	86	2	2	2	1
50-413-3	Electrical Construction (Tech)	86	2	176	176	35
50-413-4	Electrical	86	1			
50-413-5	Electrical Wireman	86	1			
50-408-1	Tech Brick Masonry	86	9	92	92	12
50-409-1	Cabinetmaking	86	2	18	18	4
50-413-7	Electrical Meterman	86	1			
50-413-8	Utility Lineman	86	1			
50-415-1	Foundry Apprentice	86	3	15	15	0
50-415-2	Foundry Patternmaker	86	1			
50-417-1	Tech Glaze (Glazier)	86	2	10	10	4
50-418-5	Meat Cutter (Correspondence)	86	1			
50-420-4	Toolroom Machinist Apprentice	86	2	11	11	0
50-420-5	Automatic Screw Machine Operator	86	1			
50-423-2	Machinery Mechanic	86	3	23	23	8

*First year in which related instruction was given program status.
Most of these apprentice programs have been in operation prior to 1980.

Table 7 (Continued)
New Programs 1980-1988

Type	Division/Program	First* Year Approved	No. of Districts	Total Enrollment 1987-88	Full-Time Enrollment 1987-88	Graduates 1987-88
	APPRENTICE (Continued)					
50-424-2	Drywall Taping and Finishing	86	2			
50-426-1	Cement and Plaster Finishers	86	1	7	7	0
50-427-3	Tech Plumbing	86	14	447	447	12
50-413-9	ABC Electrician Apprenticeship	86	4	114	114	0
50-432-1	Sheet Metal Construction	86	10	298	298	29
50-432-2	Sheet Metal - Industrial	86	5	53	53	6
50-435-3	Steamfitting Construction	86	4	43	43	0
50-435-4	Steamfitting Service	86	3	29	29	2
50-435-5	Asbestos Worker Apprentice	86	2	16	16	6
50-435-6	Steamfitter/Ind Pipefitter	86	1	23	23	0
50-437-1	Iron Worker	86	4	33	33	1
50-439-3	Tool and Die	86	12	159	159	35
50-443-1	Glazier Apprentice	86	1			
50-445-1	Appliance Service	86	1			
50-451-1	Telephone Technician	86	1			
50-457-1	Metal Fabricator	86	3	28	28	0
50-446-1	Roofer	87	1	7	7	1
50-435-7	Maritime Pipefitter Apprentice	87	1	2	2	0
50-605-1	Instrumentation Apprenticeship	87	2	45	45	1
50-404-2	Automotive Mechanic Apprentice	87	2			
50-404-3	Industrial Truck Apprenticeship	87	1			
50-408-2	Tile Setter Apprentice	87	2	10	10	2
50-419-1	Hydraulic Maintenance Apprentice	87	1	1	1	1
50-411-1	Resilient Floor Apprenticeship	87	1	26	26	6
50-445-3	Appliance Repair Serviceman Corres	87	1			
50-472-2	Industrial Truck Mechanic	87	1	7	7	0
50-401-9	HVAC ABC	88	1			
50-408-3	Cement Mason	88	1			
50-408-9	Apprentice Masons (ABE)	88	1			
50-410-2	Lather	88	1	5	5	2
50-410-9	Carpentry ABC	88	2			
50-420-6	Machine Repair	88	1	7	7	3
50-424-3	Paint & Dec/Independent Study	88	2			
50-427-9	Plumbing ABC	88	1			
50-428-1	Power Engineering Apprenticeship	88	1	2	2	1
50-432-9	ABC Sheet Metal Apprenticeship	88	2			
50-434-1	Sprinkler Fitter Apprenticeship	88	1	17	17	0
	Total Apprentice			2,168	2,168	244
	GRAND TOTAL			6,565	4,226	1,122

*First year in which related instruction was given program status.
Most of these apprentice programs have been in operation prior to 1980.

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Table 7 (Continued)
New Programs 1980-1988

SUMMARY

Division	10 Associate Degree	30 Certif-icate	31 1-Year Diploma	32 2-Year Diploma	50* Appren-tice	Total
Agribusiness	4	9	4	1	-	18
Business	11	2	5	-	-	18
Graphics	1	-	1	-	4	6
Home Economics	3	7	2	1	2	15
Service and Health	6	7	1	-	6	20
Technical and Industrial	15	8	16	3	69	111
TOTAL	40	33	29	5	81	188

*First year in which related instruction was given program status.
Most of these apprentice programs have been in operaton prior to 1980.

V. ANALYSIS OF FTE OPERATIONAL STAFF AND AVERAGE COMPENSATION BY VTAE DISTRICT 1979-80 AND 1987-88

Table 8 shows the number of operational staff equivalents, average compensation, and change for 1979-80 and 1987-88 for each VTAE District. Operational staff are those financed from General and Restricted Revenue Funds and do not include staff funded under Auxiliary or Public Service functions. The number of teaching staff equivalents is determined for each district by dividing the total personal services dollar amount by the average full-time teacher's annual salary and fringe benefits to arrive at a full-time staff. Some highlights of trends in number of operational staff and average compensation are as follows:

1. Milwaukee had the highest average compensation, including benefits, from 1979-80 to 1984-85 but was surpassed by Madison in 1985-86, 1986-87, and 1987-88. Other districts changed greatly over the eight-year period in rank of compensation; for example, decreasing were Gateway 4 to 14, Blackhawk 8 to 16, and increasing were Fox Valley 14 to 4 and Waukesha 11 to 2.

2. Waukesha had the highest average increase in compensation $21,783 (+106%) and Blackhawk had the smallest increase $10,071 (+49%) from 1979-80 to 1987-88.

3. Because of great variation by district in distribution of employees by category, only total operational staff data was used.

Table 8A shows 1987-88 faculty compensation in rank order from highest to lowest. The range is from Milwaukee $47,789 (includes salary and fringe benefits) to Indianhead $34,210.

TABLE 8

NUMBER OF OPERATIONAL STAFF EQUIVALENTS AND
AVERAGE EMPLOYEE COMPENSATION BY DISTRICT
1979-80 AND 1987-88

Rank 1979-80	No. FTE Empl.	% State	Average * Comp.	Rank 1987-88	No. FTE Empl.	% State	Average * Comp.
1 Milwaukee	1,372.0	21.7%	$27,483	1 Madison	628.1	9.3%	$42,888
2 Madison	531.3	8.4%	$25,376	2 Waukesha	452.1	6.7%	$42,302
3 Nicolet	127.5	2.0%	$21,923	3 Milwaukee	1,517.5	22.4%	$40,400
4 Gateway	436.0	6.9%	$21,719	4 Fox Valley	485.8	7.2%	$38,997
5 Western	407.6	6.4%	$21,152	5 Northeast	421.5	6.2%	$38,642
6 Chippewa Valley	365.0	5.8%	$20,944	6 Nicolet	127.1	1.9%	$37,993
7 Northeast	405.0	6.4%	$20,820	7 North Central	334.7	4.9%	$37,134
8 Blackhawk	168.0	2.7%	$20,722	8 Lakeshore	243.2	3.6%	$36,686
9 North Central	316.3	5.0%	$20,617	9 Mid-State	210.6	3.1%	$35,882
10 Mid-State	184.5	2.9%	$20,530	10 Chippewa Valley	424.0	6.3%	$35,529
11 Waukesha	472.0	7.5%	$20,519	11 Western	369.7	5.5%	$35,125
12 Lakeshore	239.7	3.8%	$19,984	12 Southwest	171.4	2.5%	$35,040
13 Moraine Park	329.1	5.2%	$19,847	13 Moraine Park	327.9	4.8%	$34,665
14 Fox Valley	482.0	7.6%	$19,491	14 Gateway	505.1	7.5%	$34,336
15 Indianhead	315.3	5.0%	$19,403	15 Indianhead	340.4	5.0%	$33,307
16 Southwest	181.5	2.9%	$18,574	16 Blackhawk	218.3	3.2%	$30,793
STATEWIDE	6,332.8	100.0%	$22,398 **		6,777.4	100.0%	$37,944 **

*Includes salary and fringe benefits.

**Mean.

NOTE: Because of differences in classifications of employees by district, only total operational employees are used in Table 8.

TABLE 8A

NUMBER OF INSTRUCTOR EQUIVALENTS AND AVERAGE COMPENSATION
1987-88

Rank 1987-88 by Compensation		# FTE	% State	Average* Compensation
1	Milwaukee	728.0	21.2%	$47,789
2	Waukesha	206.3	6.0%	$47,122
3	Madison	407.3	11.9%	$44,455
4	Lakeshore	111.5	3.2%	$44,398
5	Nicolet	52.1	1.5%	$43,999
6	Fox Valley	250.5	7.3%	$43,556
7	North Central	159.5	4.6%	$42,015
8	Northeast	230.3	6.7%	$41,959
9	Southwest	86.0	2.5%	$41,770
10	Western	190.7	5.6%	$41,198
11	Gateway	241.4	7.0%	$40,294
12	Blackhawk	98.2	2.9%	$39,977
13	Moraine Park	150.1	4.4%	$39,505
14	Mid-State	100.5	2.9%	$38,583
15	Chippewa Valley	242.3	7.1%	$36,981
16	Indianhead	179.5	5.2%	$34,210
	TOTAL	3,434.2	100.0%	$42,847 **

*Includes salary and fringe benefits
**Mean

VI. ANALYSIS OF OPERATIONAL AND DEBT SERVICE MILL RATES, TAX LEVIES, VALUATION, COST/FTE, AND STATE AIDS BY DISTRICT 1979-80 TO 1988-89

Tables 9 and 10 show mill rates and tax levies by district for 1979-80 and 1988-89 respectively. Some highlights are as follows:

1. Southwest, which had the highest total mill rate in 1988-89 at 1.911, was fifth in 1979-80 at 1.263.

2. Milwaukee had the highest total mill rate from 1979-80 to 1984-85 but dropped to number 2 in 1985-86 and to number 4 in 1986-87, 1987-88, and 1988-89 at 1.724. Milwaukee had the highest mill rate for years prior to 1979-80.

3. Blackhawk had the largest increase in total mill rate .807 (83%) from 1979-80 to 1988-89.

4. Madison had the smallest increase in mill rate .179 (15%).

5. Madison had the lowest total mill rate in 1988-89 (1.375) and Waukesha had the lowest operational mill rate of 1.34124.

Table 11 shows changes in valuation by district from 1979-80 to 1988-89. While all districts except Southwest show increases in valuation from 1979-80 to 1988-89, a majority of districts (12) decreased in valuation from 1985-86 to 1986-87. Some highlights of changes in valuation from 1979 to 1988 are as follows:

1. Waukesha had the highest percentage increase, 49.45%.

2. Southwest decreased 10.34%.

3. Milwaukee had the largest dollar value increase in valuation $5,190,064,021 (25.51%) followed by Madison $4,037,070,333 (37.10%).

Table 12 shows the changes in valuation between 1987-88 and 1988-89 (TID OUT) with the statewide total increasing 3.66%.

1. Waukesha had the largest percentage increase 8.52% ($884,111,489).

2. Milwaukee had the largest dollar increase $1,045,069,821 (4.27%).

3. Southwest was the only district to decrease, $15,824,003 (.61%).

TABLE 9
MILL RATES FOR OPERATIONAL, DEBT SERVICE, TOTAL 1979-80
AND TOTAL MILL RATE 1988-89
(Districts Rank Ordered by Mill Rate 1979-80)

Rank Order 1979-80	Rank Order 1988-89	District	1979-80 Operational Mill Rate	1979-80 Debt Service Mill Rate	1979-80 Total Mill Rate	1988-89 Total Mill Rate	1979-80 to 1988-89 Increase	% Change
1	4	Milwaukee	1.11353	0.29196	1.405	1.724	0.319	23%
2	8	Nicolet	1.20663	0.15848	1.365	1.659	0.294	22%
3	5	Chippewa Valley	1.21154	0.11542	1.327	1.722	0.395	30%
4	12	Mid-State	1.20334	0.08635	1.290	1.542	0.252	20%
5	1	Southwest	1.11622	0.14715	1.263	1.911	0.648	51%
6	13	Waukesha	1.05500	0.18210	1.237	1.474	0.237	19%
7	6	Western	1.03535	0.19185	1.227	1.720	0.493	40%
8	2	North Central	1.13137	0.08444	1.216	1.816	0.600	49%
9	16	Madison	1.01232	0.18378	1.196	1.375	0.179	15% LO
10	14	Northeast	1.07643	0.10715	1.184	1.469	0.285	24%
11	7	Lakeshore	0.98871	0.19770	1.181	1.709	0.528	45%
12	10	Indianhead	1.02986	0.14405	1.174	1.628	0.454	39%
13	9	Fox Valley	0.82668	0.24312	1.070	1.654	0.584	55%
14	11	Moraine Park	0.88336	0.18114	1.064	1.637	0.573	54%
15	15	Gateway	0.95003	0.04637	0.996	1.466	0.470	47%
16	3	Blackhawk	0.95356	0.01582	0.969	1.776	0.807	83% HI

TABLE 10

WISCONSIN BOARD OF VOCATIONAL, TECHNICAL AND ADULT EDUCATION; Madison, Wisconsin

Mill Rate and Total Tax Levy - 1988-89 by District
(Districts Rank Ordered by Total Mill Rate)

Rank Order 88-89	Rank Order 87-88	District	Operational Mill Rate*	Debt Service Mill Rate	Total Mill Rate	Operational Levy**	Non-Operational Levy***	Debt Service Only	Total Levy	% Total Levy Change Over 1987-88
1	1	Southwest	1.50000	0.41084	1.911	3,880,310	14,240	1,066,696	4,961,246	-0.7
2	2	North Central	1.50000	0.31617	1.816	6,412,444	49,718	1,362,079	7,824,241	1.1
3	3	Blackhawk	1.50000	0.27608	1.776	5,490,915	9,500	1,012,359	6,512,774	0.0
4	4	Milwaukee	1.46150	0.26260	1.724	36,453,116	863,870	6,705,148	44,022,134	4.3
5	7	Chippewa Valley	1.50000	0.22208	1.722	7,870,502	35,000	1,170,438	9,075,940	2.9
6	5	Western	1.47146	0.24817	1.720	6,677,357	58,220	1,136,000	7,871,577	0.7
7	6	Lakeshore	1.50000	0.20947	1.709	6,349,976	6,970	887,734	7,244,680	3.4
8	10	Nicolet	1.47000	0.18888	1.659	4,362,274	24,432	563,408	4,950,114	4.7
9	11	Fox Valley	1.45000	0.20398	1.654	13,761,290	0	1,935,195	15,696,485	8.8
10	8	Moraine Park	1.39236	0.24488	1.637	8,690,000	120,600	1,549,554	10,360,154	2.0
11	9	Indianhead	1.42908	0.19869	1.628	8,948,688	29,233	1,248,233	10,226,154	0.5
12	13	Mid-State	1.45336	0.08830	1.542	5,537,648	33,858	338,500	5,910,006	1.2
13	15	Waukesha	1.34124	0.13317	1.474	15,107,000	0	1,500,000	16,607,000	8.8
14	14	Northeast	1.43220	0.03630	1.469	11,800,057	1,319,367	332,533	13,451,957	1.8
15	16	Gateway	1.37134	0.09487	1.466	13,492,355	8,750	933,979	14,435,084	4.7
16	12	Madison	1.37500		1.375	19,741,093	572,528	0	20,313,621	-9.2
						174,575,025	3,146,286	21,741,856	199,463,167	2.3

*Mill Rate for all funds except Debt Service. Subject to 1.5 mill rate limit.
**Tax Levy for General and Special Revenue Funds Only.
***Tax Levy for Capital, Financial Aids, Trust and Agency, and Proprietary Funds. Subject to 1.5 mill rate limit.

TABLE 11

WISCONSIN BOARD OF VOCATIONAL, TECHNICAL AND ADULT EDUCATION
SCHEDULE OF PROPERTY VALUATION BY DISTRICT
1979-80 and 1988-89

District	Valuation 1979-80 TID OUT	Valuation 1988-89 TID OUT	Change	% of Change	Rank*
Chippewa Valley	$4,327,352,775	$5,270,334,647	$942,981,872	21.79%	10
Western	$3,909,338,615	$4,577,478,757	$668,140,142	17.09%	13
Southwest	$2,895,854,956	$2,596,366,799	($299,488,157)	-10.34%	16
Madison	$10,880,168,724	$14,917,239,057	$4,037,070,333	37.10%	4
Blackhawk	$3,387,086,025	$3,666,942,586	$279,856,561	8.26%	15
Gateway	$7,670,476,790	$9,845,168,015	$2,174,691,225	28.35%	8
Waukesha	$7,536,558,171	$11,263,469,507	$3,726,911,336	49.45%	1
Milwaukee	$20,343,944,189	$25,534,008,210	$5,190,064,021	25.51%	9
Moraine Park	$5,344,837,998	$6,327,822,185	$982,984,187	18.39%	12
Lakeshore	$3,499,925,498	$4,237,963,964	$738,038,466	21.09%	11
Fox Valley	$6,542,398,331	$9,490,545,772	$2,948,147,441	45.06%	2
Northeast	$6,524,290,059	$9,160,352,009	$2,636,061,950	40.40%	3
Mid-State	$2,919,250,114	$3,833,532,040	$914,281,926	31.32%	5
North Central	$3,738,682,559	$4,308,107,956	$569,425,397	15.23%	14
Nicolet	$2,289,004,398	$2,984,153,435	$695,149,037	30.37%	7
Indianhead	$4,807,807,252	$6,282,300,233	$1,474,492,981	30.67%	6
TOTAL	$96,616,976,454	$124,295,785,172	$27,678,808,718	28.65%	

*Rank from greatest percent of increase (1) to greatest percent of decrease (16).

TABLE 12

Wisconsin Board of Vocational, Technical and Adult Education
Schedule of Property Valuation by District

1987-88 and 1988-89
TID OUT

District	Valuation 1987-88	Valuation 1988-89	Change	% of Change	Rank*
Chippewa Valley	$5,206,793,137	$5,270,334,647	$63,541,510	1.22	13
Western	$4,540,762,903	$4,577,478,757	$36,715,854	0.81	14
Southwest	$2,612,190,802	$2,596,366,799	($15,824,003)	-0.61	16
Madison	$14,205,329,523	$14,917,239,057	$711,909,534	5.01	2
Blackhawk	$3,614,437,447	$3,666,942,586	$52,505,139	1.45	12
Gateway	$9,400,272,194	$9,845,168,015	$444,895,821	4.73	3
Waukesha	$10,379,358,018	$11,263,469,507	$884,111,489	8.52	1
Milwaukee	$24,488,938,389	$25,534,008,210	$1,045,069,821	4.27	4
Moraine Park	$6,119,332,627	$6,327,822,185	$208,489,558	3.41	6
Lakeshore	$4,177,408,490	$4,237,963,964	$60,555,474	1.45	11
Fox Valley	$9,138,047,322	$9,490,545,772	$352,498,450	3.86	5
Northeast	$8,934,654,217	$9,160,352,009	$225,697,792	2.53	8
Mid-State	$3,724,005,160	$3,833,532,040	$109,526,880	2.94	7
North Central	$4,288,829,424	$4,308,107,956	$19,278,532	0.45	15
Nicolet	$2,940,202,377	$2,984,153,435	$43,951,058	1.49	10
Indianhead	$6,135,353,993	$6,282,300,233	$146,946,240	2.40	9
Total	$119,905,916,023	$124,295,785,172	$4,389,869,149	3.66	

*Rank from greatest percent increase (1) to greatest percent decrease (16).

Table 13 shows the Cost/FTE by District for 1986-87 and 1987-88.

1. Nicolet and Waukesha had the highest cost/FTE in both years.

2. In 1987-88 seven districts were above the state average cost/FTE $5,989 (Nicolet, Waukesha, Southwest, North Central, Blackhawk, Moraine Park and Lakeshore) and nine districts were below (Milwaukee, Indianhead, Fox Valley, Gateway, Mid-State, Chippewa Valley, Northeast, Madison, and Western).

Table 14 shows Aidable Costs by District for 1987-88. Milwaukee had the highest net aidable amount $61,889,226. Nicolet had the lowest aidable amount $4,678,563.

State aids for 1987-88 are shown in Table 15. Five districts (Southwest, Blackhawk, Mid-State, North Central, and Nicolet) received supplemental aids totaling $1,789,129 over the state aids allocated by formula. Seven districts will receive Incentive Grant or supplemental aids in 1988-89.

TABLE 13

COST PER FTE BY DISTRICT
1986-87 AND 1987-88
Total FTEs All State Codes

Rank Cost Per FTE 1986-87	District	Cost/ FTE	% +/- Average*	FTE	Rank # of FTEs	Rank Cost Per FTE 1987-88	District	Cost/ FTE	% +/- Average*	FTE	Rank # of FTEs
1	Nicolet	$7,366	+32.8%	923	16	1	Nicolet	$7,848	31.0%	875	16
2	Waukesha	$6,484	+16.9%	3,493	6	2	Waukesha	$7,261	21.2%	3,229	7
3	North Central	$6,112	+10.2%	2,474	11	3	Southwest	$6,526	9.0%	1,206	15
4	Lakeshore	$5,797	+ 4.5%	1,965	12	4	North Central	$6,373	6.4%	2,404	11
5	Blackhawk	$5,791	+ 4.4%	1,585	14	5	Blackhawk	$6,333	5.7%	1,620	14
6	Moraine Park	$5,717	+ 3.1%	2,575	9	6	Moraine Park	$6,101	1.9%	2,406	10
7	Indianhead	$5,591	+ .8%	2,504	10	7	Lakeshore	$6,011	0.4%	2,004	12
8	Mid-State	$5,476	- 1.2%	1,723	13	8	Milwaukee	$5,764	-3.8%	12,551	1
9	Southwest	$5,367	- 3.2%	1,403	15	9	Indianhead	$5,742	-4.1%	2,560	9
10	Milwaukee	$5,354	- 3.5%	12,963	1	10	Fox Valley	$5,699	-4.8%	4,258	3
11	Fox Valley	$5,296	- 4.7%	4,269	4	11	Gateway	$5,677	-5.2%	4,035	4
12	Madison	$5,002	- 9.8%	7,006	2	12	Mid-State	$5,608	-6.4%	1,719	13
13	Chippewa Valley	$4,886	-11.9%	3,454	7	13	Chippewa Valley	$5,424	-9.4%	3,395	6
14	Western	$4,870	-12.2%	3,215	8	14	Northeast	$5,271	-12.0%	3,986	5
15	Northeast	$4,850	-12.5%	4,015	5	15	Madison	$5,206	-13.1%	7,246	2
16	Gateway	$4,770	-14.0%	4,529	3	16	Western	$4,973	-17.0%	3,155	8
		$5,546 *		3,630			Average	$5,989 *		3,540	

*Unweighted average of districts (actual average statewide is $5,775, 1987-88 and $5,362, 1986-87).

Source: 1986-87 and 1987-88 Cost Allocation Summary (Actual); Wisconsin Board of Vocational, Technical and Adult Education.
MATC Research, Planning, and Development; January 1989

TABLE 14

AIDABLE COSTS BY DISTRICT
1987-88

District	Net Aidable Amount	% of Total
Milwaukee	$61,889,226	23.2%
Madison	$31,420,476	11.8%
Fox Valley	$19,450,113	7.3%
Waukesha	$19,066,885	7.2%
Gateway	$17,824,478	6.7%
Northeast	$15,963,353	6.0%
Chippewa Valley	$14,373,640	5.4%
Moraine Park	$12,962,625	4.9%
Indianhead	$12,774,539	4.8%
Western	$12,568,884	4.7%
North Central	$11,625,005	4.4%
Lakeshore	$9,750,421	3.7%
Blackhawk	$8,178,508	3.1%
Mid-State	$7,593,912	2.8%
Southwest	$6,461,452	2.4%
Nicolet	$4,678,563	1.8%
TOTAL	$266,582,080	100.0%

TABLE 15

STATE AID ANALYSIS - 1987-88

District	State Aid Prorated	% of Total	Supplemental State Aids Distribution	Total All State Aids	Percent All State Aids
Milwaukee	$19,895,131	24.8%		$19,895,131	24.27%
Madison	$9,786,989	12.2%		$9,786,989	11.94%
Chippewa Valley	$5,845,698	7.3%		$5,845,698	7.13%
Fox Valley	$5,645,320	7.0%		$5,645,320	6.89%
Western	$5,517,401	6.9%		$5,517,401	6.73%
Gateway	$4,851,808	6.1%		$4,851,808	5.92%
Northeast	$4,349,804	5.4%		$4,349,804	5.31%
North Central	$4,096,915	5.1%	$133,700	$4,230,615	5.16%
Waukesha	$3,703,145	4.6%		$3,703,145	4.52%
Indianhead	$3,349,815	4.2%		$3,349,815	4.09%
Moraine Park	$3,184,989	4.0%		$3,184,989	3.89%
Lakeshore	$2,943,554	3.7%		$2,943,554	3.59%
Blackhawk	$2,292,814	2.9%	$230,300	$2,523,114	3.08%
Mid-State	$2,204,371	2.7%	$45,200	$2,249,571	2.74%
Southwest	$1,860,197	2.3%	$383,400	$2,243,597	2.74%
Nicolet*	$640,349 *	0.8%	$996,529 *	$1,636,878	2.00%
	$80,168,300	100.0%	$1,789,129	$81,957,429	100.00%

*Nicolet received supplemental state aids for College Parallel courses in 1985-86 and 1986-87 of $856,200 in both years and $996,529 in 1987-88.

Limited Fiscal Planning Amounts in 1988-89 are as follows:

Chippewa Valley	$67,300
Southwest	$864,400
Blackhawk	$357,861
Lakeshore	$123,900
Mid-State	$53,217
North Central	$320,247
Nicolet	$50,000 (Estimated)

Nicolet will also receive supplemental aid of $970,000 for College Parallel

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CONCLUSIONS

The following are conclusions of the author based upon analysis of operational planning data.

1. Enrollment in VTAE schools is more dependent upon economic and social changes than population changes. Availability of employment, economic, and social forces determine the number of people who enter postsecondary education and the level of education selected (diploma, certificate, associate degree, bachelor's degree).

2. There does not seem to be significant unnecessary duplication of programs between districts. Over time since the 1960s, each VTAE district has developed programs and curricula that are designed to meet the needs of the local communities.

3. Attempts by the State Board to regionalize programming are unnecessary. Market forces determine the vitality of programs in each district and local boards are very conscious of costs. It is unfair to local residents to have to travel to other communities at considerable individual cost when it is not necessary. Voluntary cooperative efforts between districts in programming may be required.

4. Graduates from the VTAE system are primarily from long-established programs (office occupations, distributive education, service and health occupations, technical, and industrial). In 1987-88 about two-thirds (65%) of the graduates of the system were from 39 of the 336 programs producing graduates.

5. Technological change, primarily microcomputers and computer-related equipment, has provided new tools for established professions and VTAE programs. Students must learn to utilize these new tools and VTAE education must provide state-of-the-art equipment for its occupational programs.

6. New programs provide relatively few graduates in the VTAE system. The 107 new degree, diploma, and certificate programs approved by the state since 1980 produced 878 or 6.0% of all graduates in 1987-88. This does not mean that VTAE schools are not responsive to change. VTAE schools are flexible and respond to the needs of business and industry by updating long-established programs and providing customized courses and training activities. Emerging new occupations having all new occupational tasks are few in number.

7. VTAE programs grow, decline, and die primarily because of "market forces" and student demand and not often because of deliberate planning and projecting. Market forces are primarily motivated by employment availability and volume of jobs available. A small number of occupational groups account for the majority of total job growth in the state and nation (retail sales workers, waiters and waitresses, nurses, custodial workers, general managers and executives, cashiers, office clerks, etc.). Nursing Assistant programs in the VTAE system produced more graduates in 1987-88 (1,158) than the 107 new associate degree, diploma, and short-term programs (878) approved by the state since 1980.

8. The reason that the VTAE system cannot precisely project emerging occupations and enrollments in individual programs is that "experts" are unable to project anything precisely for any length of time because economic and social forces can change (up, down, and sideways) quickly while reliable projections depend upon a relatively unchanging future. High technology emerging occupations provide a relatively small number of jobs.

9. District boards and administrators are responsive to the needs of the community including the effects of VTAE educational programming on the taxpayers of their district. State aid support for VTAE has declined from 37% to 29% since the 1970s. In the last three years, the financial condition of districts has deteriorated because of declining or slowly increasing property valuation. If state aids are not increased proportionately, the effect on educational offerings and services in the state VTAE schools will be significant.

10. Tuition and fees for VTAE students is above their ability to pay and is a negative economic factor affecting enrollments. This is illustrated by study of the starting salaries of graduates. Service and Health Occupations are replacing technical and industrial as the highest paying occupations. Nursing at $20,796 per year has the highest median salary for graduates of all programs in the state in 1987. The median salary of the top 50 programs in number of graduates was $12,474 annually in 1987 which is about $6.00 per hour with a 40-hour week.

11. Programs with few or no graduates provide individual courses that are utilized for job training. Over 85% of VTAE students are enrolled in fewer than 12 credits in a given semester. A majority of MATC students are interested in completing selected courses rather than a program.

COMMON MYTHS IN THE VTAE SYSTEM

These myths will be addressed in future studies of the State of Wisconsin VTAE System. These are harmless general statements that are said by "experts" and repeated by others. They are harmless because specific action is seldom taken based on them because no one really knows what to do. However, the system is often criticized for not acting on them.

Labor Market Information and Projections

1. a. Labor market demand can be projected quantitatively for individual VTAE programs statewide or by district if only someone gathered the "right" data and organized it properly.
   OR
   b. Statewide assessment of employer training needs can be carried out and used to determine training needs for all new or existing programs in the districts.

2. There is a large and significant mismatch of jobs and qualified people.

3. VTAE Districts or a State VTAE system can alleviate identified mismatching by adding new programs.

4. Future labor market projections can be used as the primary criterion for discontinuing a currently viable program.

High Tech

1. "High-Tech" occupations are the emerging high employment growth occupations of the future.

2. VTAE schools are not responsive to demands by business and industry for new "High-Tech" programs in emerging and growth occupations.

3. Because of "high tech," workers will change their basic occupations many more times in the future than workers did in the past.

4. Because of "high tech," there are many new occupations that do not exist today that will employ large numbers of people in the 1990s and the next century.

Enrollment Management

1. Centralized statewide planning and analyses can correctly determine the level of support and extent of offerings required by the competing needs of occupational education and training, adult basic education, college parallel, customized training, technical assistance, and student support services statewide.

2. Student demand can be accurately projected and enrollments in programs effectively controlled on a statewide basis to satisfy the "needs" of students and business and industry.

Fiscal Planning and Management

Basic Assumptions for VTAE Central Planning

1. District boards and district administrators are not concerned about duplication of programs and services, personnel and operational costs, and are not familiar with taxpayer "needs."

2. District boards and district administrators are not able to effectively control costs because their primary concern is to please all special interests in the district and offer every program and service possible regardless of cost.

3. District boards and district administrators are political, arrogant, and do not react to the needs of the community or business and industry.

4. Statewide planning is less political, more responsive and flexible, reduces costs, and will better meet the "needs" of the people and business and industry of the state.

5. Cost reductions require that programs be discontinued. Districts cannot reduce costs sufficiently by cutting back on course offerings, departments, services, operations, and administration.

   Meaningful cost reductions require that some personnel be laid off. Shifting and retraining of personnel and not filling positions of personnel who leave voluntarily is not satisfactory since no employees are hurt by these procedures, which is a sign of weak management and failure to "bite the bullet."

6. Districts at the 1.50 mill rate are the highest cost/FTE districts and are poorly managed.

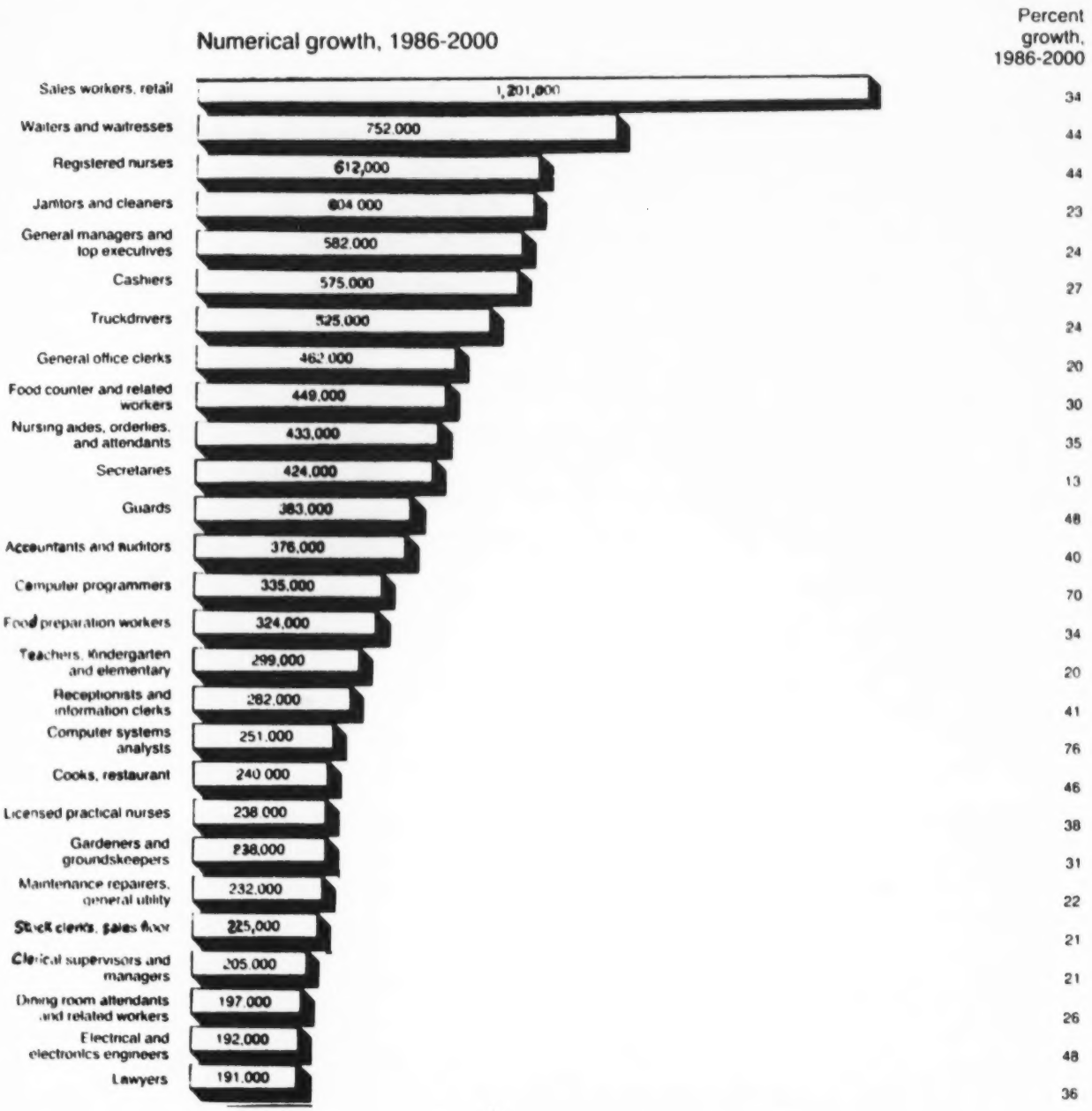
7. The vocational-technical student's ability to pay is similar to UW students.

8. District boards are not concerned about costs and are responsible for a great amount of unnecessary and costly expansion of VTAE facilities. State Board and state staff continually approve costly expansions without careful review of "needs" and cost.

All of the above basic assumptions are false in the opinion of the writer. Individual examples may be found which would support the statements, but in most cases the opposite of the above is true.

The opinions expressed in this report are those of the writer and not necessarily those of all of the State Research, Planning, and Development Committee or State Board staff who reviewed this report prior to publication. Responses by committee members and state staff to drafts of data and conclusions in the report were generally favorable.

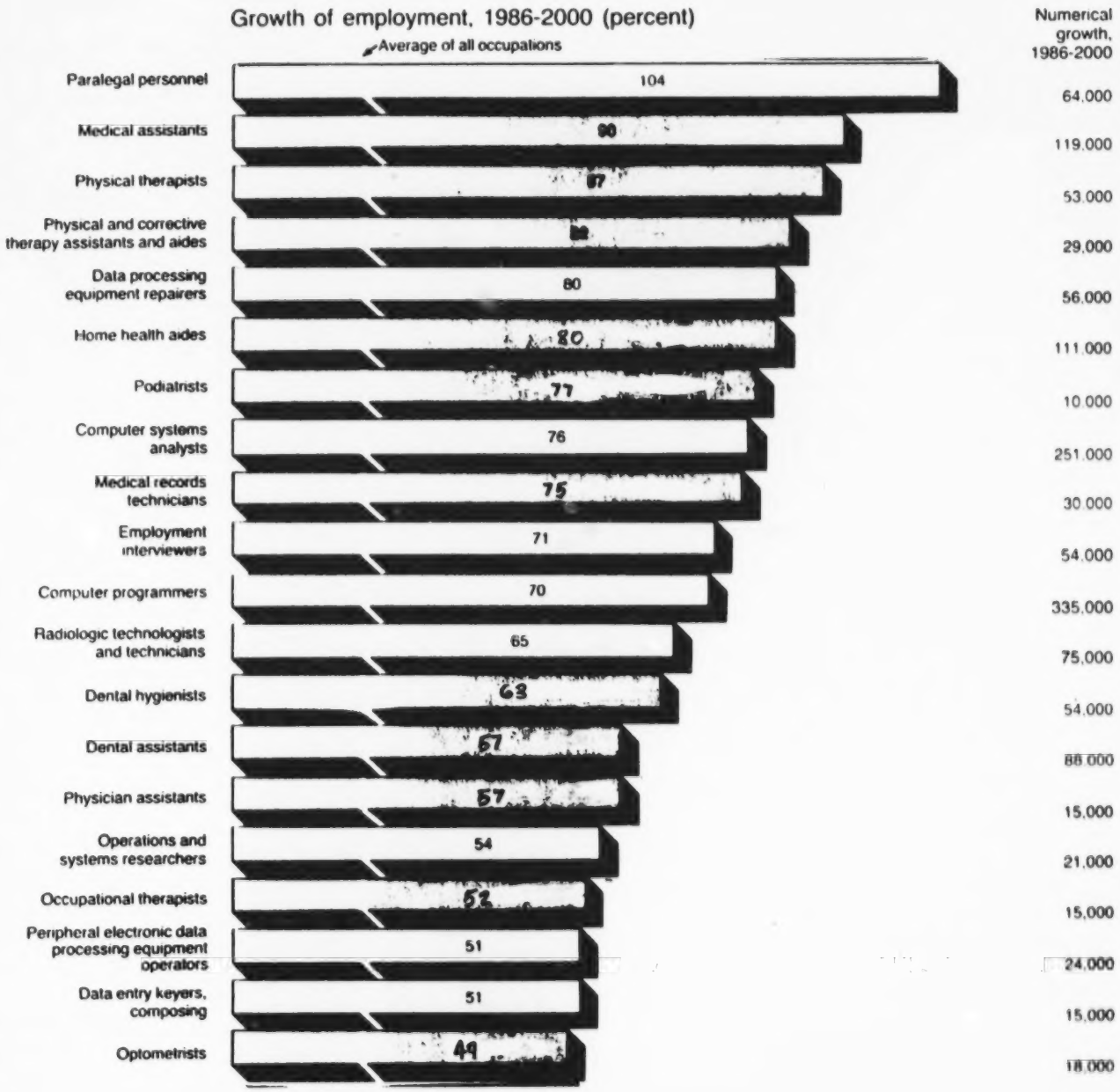
A small number of occupations will account for more than one-half of total job growth.



Most of these occupations are growing faster than the average for all occupations.

Those growing less rapidly are very large, so that the numerical increase is still great.

Twelve of the twenty fastest growing occupations provide health services.



The number of paralegal personnel--the fastest growing occupation--is expected to double.

Four of the twenty fastest growing occupations are in the computer field.

Appendix B was removed because of copyright restrictions. It contained an article from the Milwaukee Sentinel of February 24, 1989 entitled, "73% of New Jobs Pay or $241 or Less."

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